*Florida Department of Transportation*
*District Four*

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange

## Broward County, Florida

**UPDATED**
**July 2009**

**Financial Project Number: 420809-3-52-01**

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## 19.0 EXECUTIVE LEADERSHIP ENDORSEMENT

# i. INTRODUCTION

## i.1 PURPOSE OF THE PMP

The ultimate purpose of the Project Management Plan (PMP) is to clearly define the roles, responsibilities, procedures, processes and activities of the FHWA, FDOT, Executive Oversight Committee (EOC), Corridor Management Team (CMT), Concessionaire and other stakeholders in meeting the I-595 Corridor Improvements Project (Project) objectives and goals described in Section i.3.

The PMP outlines the proposed management structure and strategy, and describes all aspects of contract and project administration, quality assurance/control, contract deliverables, budget and cost control methods, document control, scheduling, and internal/external communication for optimal control throughout the project duration.

## i.2 UPDATING AND CONTROL OF THE PMP

Adherence to the goals and objectives of the PMP, as well the preparation of PMP updates will be the responsibility of the CMT throughout the duration of the Project. The Concessionaire will be responsible for providing the CMT with support documentation and updates to their internal management plan documents as required for the PMP updates.

FHWA originally approved the I-595 PMP on February 21, 2007, prior to FDOT's decision to implement a public-private partnership (P3) to design, build, finance, operate and maintain the Project for a 35 year term. This document serves as the update to the original PMP to reflect all changes in the management and implementation of the Project as a result of the P3 decision.

## i.3 PROJECT OBJECTIVES AND GOALS

The project objectives and goals include:

- The project improvements will increase capacity and reduce congestion in order to maintain adequate service levels on project-related facilities.
- Each of the nine (9) project zones will be constructed on time. The scheduled completion date for each zone will be met or bettered.
- The nine (9) project zones will be constructed within budget. The total project construction budget will be met or bettered.
- The Project will be designed, constructed, operated and maintained with the highest degree of quality possible.
- The Project will be constructed, operated and maintained in a safe environment, for both the workers and the traveling public.
- The Project will be operated and maintained to a level that meets or exceeds the performance requirements established in the Contract Documents.
- All Federal and statutory requirements will be achieved.
- Participation by disadvantaged business enterprises and minority business enterprises will be consistent with the contract requirements and applicable laws and regulations.
- Public trust, support, and confidence will be maintained throughout the life of the Project. The means to achieve this include:
    - The media and public will be continually and adequately informed.
    - Inconvenience to commuters, residents and businesses will be minimized.

- All environmental and other project commitments will be accomplished.
- Integrity and competency will be maintained regarding the stewardship and oversight of all public funds.
- FHWA, FDOT, local agency and public expectations will be maintained.

## i.4 LEGAL AND STATUTORY AUTHORITIES

Legal and statutory authority for this project is under the provisions of:

- Titles 23 and 49, United States Code
- Titles 23 and 49, Code of Federal Regulations
- Chapter 334, Florida Statutes.

## i.5 PMP REFERENCE INFORMATION

A list of acronyms contained within the PMP is included as **Exhibit A of the Appendices**. Hyperlinks to the various standards, Contract Documents, agreements and procedures references contained within the PMP are included as **Exhibit B of the Appendices**.

# 1.0 PROJECT DEVELOPMENT, DESCRIPTION AND SCOPE OF WORK, AGREEMENTS

## 1.1 PROJECT DEVELOPMENT

### 1.1.1 Background and History

The I-595 corridor is located in central Broward County, Florida and is maintained and operated by the Florida Department of Transportation District 4 (FDOT D4). The I-595 improvement limits extend from the I-75/Sawgrass Expressway interchange (west of SW 136th Avenue) to the I-595/I-95 interchange, for a total project length of approximately 10.5 miles **(refer to Exhibit C for the project corridor map)**. The I-595 corridor passes through or lies immediately adjacent to six governmental jurisdictions: the City of Sunrise, Town of Davie, City of Plantation, City of Fort Lauderdale, and Town of Dania, as well as unincorporated areas of Broward County.

The current I-595 facility was opened in 1989, coordinating the movement of high traffic volumes between the developable areas in the western parts of the Southeast Florida region with the established north-south freeway and principal arterial systems to the east. The majority of the I-595 corridor is comprised of two facilities: I-595 and SR-84. The I-595 portion of the corridor is a six lane, limited access facility. In addition to the interchanges with the two freeway systems at each end of the study corridor (I-75 to the west and I-95 to the east), there are nine other interchanges along the corridor at the following crossroads: SW 136th Avenue, Flamingo Road (SR 823), Hiatus Road, Nob Hill Road, Pine Island Road, University Drive (SR-817), Davie Road, Florida's Turnpike (SR-91) and SR-7 (US 441).

The SR-84 portion of the corridor lies both north and south of the I-595 mainline. The two lanes north of the mainline operate one-way westbound, while the two lanes south of the mainline operate one-way eastbound. In the area west of the I-75 interchange and continuing east to Davie Road, the SR-84 lanes serve as a collector-distributor system to the I-595 mainline. The SR-84 system is suspended through the I-595 interchanges with Florida's Turnpike and SR-7. East of the SR-7 interchange, the SR-84 and I-595 rights of way separate. The SR-84 alignment veers to the northeast and the I-595 alignment continues nearly due east.

For various reasons, travel demand within the corridor had increased at a pace where the long-range traffic forecasts for the current highway would be reached in the short-term. Quantification of traffic growth in the corridor, assessments of corridor operations, and recommendations for measures that could be enacted in the short term were prepared in the Interstate 595 Freeway Operational Analysis, Final Report in 1994.

To prepare for the continued evolvement of I-595, the FDOT determined that a Corridor Master Plan should be developed. In the late 1990's, most of the recommendations from the Master Plan for the region's I-95 corridor (prepared in the early 1980's) had been implemented, and the corridor was rapidly approaching its planning horizon. Therefore, I-95 was also in need of a new Master Plan which would address any remaining safety, capacity, and multimodal options that could be incorporated within the next 25 years. These two efforts were combined, and the I-95/I-595 Master Plan Study was completed in 2003.

The result of the Master Plan Study was a Locally Preferred Alternative (LPA) for the I-595 corridor, focusing on improvements between I-75 and I-95. This LPA served as the base alternative for further evaluation under the I-595 Project Development and Environment (PD&E) Study.

### 1.1.2 Project Purpose and Need

The I-595 corridor is an important link within the Florida Intrastate Highway System (FIHS). The FDOT published an FIHS 2025 Cost Feasible Plan Update in 2003. The importance of this update was that it contained revenue forecasts that reflect the priorities and economic realities of

the state's post-9/11 economy. The highway portion of the proposed I-595 improvements appears as five separate projects in the District 4 portion of the FIHS Long-Range Plan. The projects include reconstruction of multiple interchanges, construction of express lanes, and improvements to the causeway mainline itself.

The I-595 corridor is also considered a Designated Strategic Intermodal System (SIS) Highway Corridor link of the state's intermodal transportation network. FDOT's Central Office staff has completed the bulk of the SIS network development. The first coordinated intermodal SIS network Needs List has been completed and includes all SIS facilities projects that have passed established criteria and that have been identified in at least one other long-range planning effort. On November 2, 2005, the Executive Office of the Governor announced the SIS Growth Management projects proposed for funding between fiscal years 2005/2006 and 2010/2011, which included nine of the I-595 corridor projects identified in the I-595 PD&E Study. The I-595 Master Plan-defined LPA is also included in the Broward County MPO 2030 Long-Range Transportation Plan.

The purpose of the improvements proposed for the I-595 corridor is in compliance with the FDOT Mission Statement:

***The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.***

#### *1.1.2.1 Safe Transportation*

The proposed improvements will enhance the safe operation of the corridor by increasing the number of persons, vehicles and travel modes it can accommodate. This is an asset to residents, visitors, and commerce.

The improvements proposed for the corridor specifically address the following conditions:

- The separation of long-distance users of the corridor from those having local interchange destinations – as will be achieved by the construction of the median express (reversible) lanes - will help to eliminate the speed differential and lane changing friction that is a contributing factor in sideswipe and angle crashes on interstate facilities.
- The introduction of braided ramp configurations at selected locations, reconfiguration of interchange ramps at other locations, increased numbers of auxiliary lanes between interchange pairs, and extension of the SR-84 Collector-Distributor (C-D) network through a greater portion of the corridor will also help in reducing congestion along the mainline, thereby improving ramp-traffic merging operations and relocating the congestion that occurs to the slower speed SR-84 C-D system.
- The I-595 corridor plays an important role in the region's emergency evacuation plans. Improvements to the corridor will help move large volumes of people and vehicles away from coastal areas, directing traffic to central Florida roadways (Florida's Turnpike, I-75, and US 27) and allowing the Interstate routes closer to the coast to be used for influx of emergency responders and supplies.

These measures will, in turn, improve not only the efficiency and safety of corridor operations, but will also help to improve emergency service provider response times while increasing the person throughput of the corridor.

#### *1.1.2.2 Economic Prosperity*

Because of its critical location in the center of Broward County and its proximity to a wide range of other major transportation hubs and corridors, such as Port Everglades, Fort Lauderdale-Hollywood International Airport, Florida East-Coast Rail Line, and Tri-County Commuter Rail, as well many of the region's major north-south expressways and principal highways, improvements

to the I-595 corridor are a boost to the state and regional economic competitiveness in the global market.

I-595 is the only east-west corridor that serves to connect all of the major north-south routes in the region: US 27, Sawgrass Expressway, Florida's Turnpike, SR-7, I-95, and US 1. Initial investigations into development of an additional east-west corridor have indicated that such an effort would be very costly and require a number of years to implement. Widening of the I-595 corridor, however, would greatly assist in meeting the additional capacity needs. It is also a measure that can be implemented at considerably less cost and within a much more reasonable time frame than development of a new corridor. The Freight Movement Initiative backed by the Broward County Metropolitan Planning Organization has been one of the most vocal proponents of capacity improvements to the I-595 corridor.

The role of the I-595 corridor in the SIS, its integration into the growth and success of major transportation hubs, and its key role in the general freight and goods movement strategies of the region serve to underscore the economic benefits that will come from maximizing the operational efficiency of the I-595 corridor. Improvements in corridor capacity and interchange configurations will result in reduced congestion, less delay, and decreased travel times for goods and freight movement.

#### *1.1.2.3 Quality of Life*

Implementation of the proposed improvements is important for continuing and improving the quality of life for residents, business, and visitors to the communities of Southeast Florida. It allows the communities located along the corridor to achieve the goals of their long-range comprehensive plans by supporting their continued economic development.

The proposed improvements to the I-595 corridor have been developed in a manner that ensures that the qualities of life that are of value to Florida citizens are sustained: preserving parklands, protecting sensitive wetlands, and taking appropriate measures to mitigate any environmental impacts that may occur. The potential environmental impacts of the project are detailed in the I-595 Environmental Determination, Type 2 Categorical Exclusion, the Design Change Reevaluation, and the Construction Advertisement Reevaluation, all concurred by FHWA.

### 1.1.3 Federal NEPA and Decision Documents

FDOT D4 completed the I-595 PD&E Study that encompasses the project limits. The Environmental Class of Action Determination for a Type 2 Categorical Exclusion has been deemed appropriate by FHWA, and Location and Design Concept Approval (LDCA) from FHWA was received on June 29, 2006. Subsequently, a Design Change Reevaluation was approved by FHWA on November 28, 2007, and a Construction Advertisement Reevaluation was approved by FHWA on April 8, 2008. **Refer to Exhibit B for the hyperlinks to the Type 2 Categorical Exclusion and reevaluation documents.**

Additional reevaluations are anticipated to be completed as the Project is designed and constructed.

### 1.1.4 Project Commitments

The project commitments contained in the approved Type 2 Categorical Exclusion were updated in the Design Change and Construction Advertisement reevaluations. The project commitments made to date are provided in the Concessionaire's Environmental Compliance Plan **(hyperlink provided in Exhibit B)**, which will be continuously updated by the Concessionaire to identify future project commitments.

The FDOT will comply with the general and special conditions stipulated in the approved permits identified in Section 9.2. The Concessionaire will coordinate with the respective regulatory agencies and modify any permits necessary to gain authorization to deviate from the currently approved permits.

### 1.1.5 Status of Project

On March 3, 2009, FDOT signed a P3 agreement with I-595 Express, LLC, a consortium created by ACS Infrastructure Development (ACSID), who will serve as the Concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the Project through the 35-year agreement term.

On July 1, 2009, FHWA granted acceptance of FDOT's application to toll the Project under the Express Lanes Demonstration Program (ELDP). A tolling agreement between FHWA and FDOT is to be executed by both parties prior to September 30, 2009.

Design, permitting and field survey activities on the Project have commenced, and the Concessionaire is refining the Corridor Master Plan for CMT concurrence. Construction plans for the New River Greenway, the Interim Transportation Management System (ITMS) and select sound barriers are under final development. Conceptual permits are being modified as necessary and separated into individual construction permits to match the construction sequencing of the Project. Topographic surveys and geotechnical investigations are being completed as needed for the project design.

Initial construction activities for components of the Greenway and ITMS have commenced, with construction of select sound barriers to follow in Summer 2009. Major construction activities involving roadway and bridge construction are anticipated to commence in Fall 2009 and are scheduled for completion in Spring 2014.

Responsibility for operations and maintenance of the Project will be turned over to the Concessionaire on July 31, 2009 and will continue throughout the 35 year term of the P3 agreement.

## 1.2 PROJECT IMPROVEMENTS DESCRIPTION AND SCOPE OF WORK

As previously identified, the limits of the Project extend from the I-75/Sawgrass Expressway interchange to the I-595/I-95 interchange, in Central Broward County, Florida, for a total project length of approximately 10.5 miles. The Project consists of the reconstruction, addition of auxiliary lanes and resurfacing of the I-595 mainline (including associated improvements to frontage roads and ramps), and a new reversible express lanes system in the I-595 median. Highlights of the major improvement components include **(refer Exhibit C for the project corridor map and Exhibit D for the I-595 typical section)**:

- Tolled, reversible ground level express lanes to be known as 595Express, serving express traffic to/from I-75/Sawgrass Expressway from/to east of SR-7, with a direct connection to the median of Florida's Turnpike.
- Geometric improvements to the I-595 / Florida's Turnpike interchange.
- Widening / reconstruction of the Florida's Turnpike mainline from Griffin Road to Peters Road (2.7 miles) to accommodate the express lanes direct connection.
- Addition of auxiliary lanes on the eastbound and westbound I-595 and SR-84 roadways.
- Continuous connection of the SR-84 frontage roads between Davie Road and SR-7.
- Grade separated (braided) entrance and exit ramps.
- Combined ramps and cross-road bypasses.
- Construction of the New River Greenway, a component of the Broward County Greenways System.
- 13 sound barriers providing noise abatement for 21 communities adjacent to the corridor.
- Implementation of Bus Rapid Transit (BRT) / Express Bus service within the I-595 corridor.

- Accommodation of a transit envelope within the corridor, currently under development as part of the Central Broward East-West Transit Analysis.

Sections 1.2.1-1.2.11 further describe the major components of the project improvements. Refer to Vol II Div II Sects 1-3 of the Contract Documents **(hyperlink provided in Exhibit B)** for detailed information on the scope of work for the project improvements.

### 1.2.1 Mainline I-595

Mainline I-595 currently has three general purpose lanes in each direction with zero, one or two auxiliary lanes between interchanges. Opposing traffic is separated by a grass median that ranges from 64 feet to 68 feet in width. The proposed improvements will maintain the existing number of general purpose lanes in both directions, and provide additional auxiliary lanes between interchanges to reduce congestion caused by merge, diverge and weaving movements.

The proposed eastbound profile grade line will generally remain in its existing location, 32-34 feet right of the centerline of construction. The eastbound general purpose lanes will require widening and/or reconstruction, including reconstruction in the two I-595 express lane exchange areas to accommodate the express lanes access/egress ramps. To minimize right of way impacts and accommodate a future transit alignment to the south, the westbound roadway will be shifted to the north to provide for the express lanes in the median.

Mechanically stabilized earth (MSE) walls are proposed in lieu of fill slopes where the I-595 profile rises to pass over crossroads. Barrier wall and/or guardrail along the outside shoulder will be required for much of the I-595 mainline due to clear zone issues and grade differentials between I-595 and SR-84.

### 1.2.2 Mainline I-595 Interchanges

As presently configured, I-595 is served by tight diamond interchanges with frontage roads at SW 136$^{th}$ Avenue, Flamingo Road, Hiatus Road, Nob Hill Road, Pine Island Road, University Drive, and Davie Road. In addition to the tight diamond configuration, the University Drive interchange also includes two third-level flyover ramps serving the southbound to eastbound and northbound to westbound movements. The SR-7 and Florida's Turnpike interchanges are complex system interchanges with frontage roads.

Major improvements are proposed for the mainline interchanges to eliminate operational deficiencies in the outer lanes caused by merge, diverge and weaving segments along the mainline. The proposed improvements accomplish this by introducing eight (8) braided ramps, eliminating on and off-ramps by combining ramp movements (including three (3) bypass bridges), and exchanging the location of ramps (placing off-ramp before the on-ramp). The improvements either eliminate the mainline weaving segments or move the weave onto the frontage road (SR-84). All ramps will be parallel in type with auxiliary lanes beginning/ending at the ramp gores to improve the operations of the merging and diverging segments.

The mainline bridges over all crossroads will be widened or reconstructed, and the University Drive flyover serving the southbound to eastbound movement will be modified to accommodate the realignment of eastbound I-595. The realignment of eastbound I-595 through this interchange is required because the express lanes will generally be aligned along existing eastbound I-595, and the new alignment of eastbound I-595 will be shifted to the south.

### 1.2.3 Express Lanes and Exchanges

The Express Lanes will significantly improve the capacity and operations of the I-595 corridor by providing three (3) reversible lanes in the median. The lanes will reverse direction in order to better serve peak traffic demands (eastbound in the a.m. / westbound in the p.m.), removing a portion of the long distance through traffic from the I-595 general purpose lanes. To maximize the operational efficiency, the lanes will be tolled utilizing variable pricing. Broward County's Bus Rapid Transit (BRT) and registered 3+ carpools will travel toll free on the express lanes.

Ingress and egress to and from the express lanes will be limited to four (4) exchange points. The western ingress/egress point is proposed west of Flamingo Road, serving I-75 and Sawgrass Expressway; the eastern location is proposed between Florida's Turnpike and SR-7, serving points east of SR-7 including I-95; the southern location is proposed along Florida's Turnpike between I-595 and Griffin Road; and the northern location is proposed along Florida's Turnpike between Peters Road and I-595. The I-595 and Turnpike mainline medians will be widened to accommodate the Express Lane exchanges. **Refer to Exhibit E for the express lanes diagram**.

West of Davie Road, the express lanes will generally follow the profile of the I-595 general purpose lanes, requiring median bridge structures over the crossroads. The express lanes typical section will include three 12-foot lanes and 10-foot left and right shoulders, with barrier wall separation between the express lanes and the I-595 general purpose lanes. East of Davie Road, the express lanes will elevate to provide the direct connection to the Turnpike median.

Overhead Dynamic Message Signs (DMS) will guide motorists into or away from the auxiliary lanes leading to the express lanes, depending on the time of day. Opposing traffic will be prohibited from entering the express lanes by access control gates that extend from the inside barrier wall in the area of the auxiliary lanes. Access control barriers and automated security gates will also be used to prohibit motorists from entering or exiting the express lanes in the wrong direction.

Tolls will be collected electronically from a single reversible tolling point within the at-grade portion of the express lanes. The Concessionaire will be responsible for the construction and maintenance of the tolling gantry structure and all related infrastructure. Florida's Turnpike Enterprise (FTE) will provide, install, operate and maintain the electronic tolling equipment for the express lanes, and will manage all SunPass customer services and violation enforcement. FDOT will set the toll rates and retain the toll revenue.

Emergency response provisions for the express lanes will include emergency access gates and a fire suppression system. Five (5) emergency access gates (two in the eastbound direction; three in the westbound direction) will provide emergency responders with strategic accessibility to the express lanes from the I-595 general purpose lanes. The fire suppression system will provide an emergency water supply to the express lanes via a piping system and fire department connections adjacent to fire hydrants located along the south side of eastbound SR-84.

### 1.2.4 Florida's Turnpike Mainline

The Florida's Turnpike mainline will be realigned from north of Griffin Road to the south abutment of the Florida's Turnpike bridges over I-595, and also from the north abutment of the Florida's Turnpike bridges over I-595 to Peters Road. The Florida's Turnpike median will require widening in these two areas to allow for the express lane exchange areas. In addition, Florida's Turnpike northbound will be widened to the outside to allow for the extra lanes from the proposed WB-NB on-ramp.

### 1.2.5 Florida's Turnpike Interchange

The proposed reconfiguration of interchange ramps will reduce the number of weaving sections, increase acceleration lengths, and improve operations within the interchange. The addition of the westbound to northbound ramp will remove traffic from the short weaving section where eastbound and westbound I-595 traffic currently converges, then diverges to northbound and southbound Turnpike. The eastbound/westbound I-595 bridge to southbound Turnpike will be reconstructed as a three-lane bridge. The Griffin Road southbound off-ramp will be relocated to the north to accommodate the additional lane from the eastbound/westbound I-595 bridge to southbound Turnpike. The two existing northbound Turnpike off-ramps to eastbound and westbound I-595 will be combined to form a three-lane off-ramp, then diverge, rather than having two separate mainline exits. The I-595 to northbound Turnpike loop ramp and the southbound Turnpike off-ramp will be reconstructed with larger radii.

### 1.2.6 Transit Facilities

The Master Plan LPA recommended development of a transit element within the I-595 corridor. The transit concept incorporated into the study corridor was from the LPA that emerged from the Central Broward East-West Transit Alternatives Analysis (CBE-WTAA), a separate investigation that recommended construction of a light rail transit system within the I-595 right of way. On April 14, 2005, the Broward County MPO endorsed the I-595 corridor as the preferred location for the transit alignment, and selected light rail transit (LRT) as the preferred transit mode.

A preliminary envelope for a future elevated transit corridor was developed by the CDC during the procurement phase of the Project. The Preliminary Central Broward East-West Transit Analysis (CBEWTA) Alignment through the I-595 corridor included in the Contract Documents proposed the future elevated transit corridor on the south side of I-595, generally north of eastbound SR-84, between SW 136th Avenue and SR-7, staying within the highway right of way. The transit envelope must be preserved in the Concessionaire's design, including considerations for future foundations. The Concessionaire is required to modify (if necessary) this preliminary alignment to coincide with the Concessionaire's proposed I-595 roadway alignment including SR-84, associated ramps, and crossroads in accordance with the Transit Design Criteria in Volume III of the Contract Documents. The Concessionaire is required to develop the alignment to a design level sufficient to minimize and preferably eliminate future reconstruction of roadway facilities built by the Concessionaire and to identify/preserve future foundation footprints for transit. Any re-alignment by the Concessionaire would need to comply with the design criteria established in the Transit Design Criteria. Construction of transit elements, including substructures, will not be part of this Project.

Any modifications to the preliminary transit alignment envelope along the corridor will require approval from FDOT D4 prior to commencing final design activities for I-595. The Concessionaire will meet with the FDOT D4 and the CBEWTA representatives on a regular basis to ensure accommodation of key transit design components, including geometry, transit entry/exit points and structural depth requirements.

### 1.2.7 SR-84

Currently, SR-84 is a four-lane frontage road facility (two lanes in each direction) located along the north and south sides of I-595. Limited right of way, proposed mainline auxiliary lanes, realigned ramps, braiding of ramps, proposed bicycle/pedestrian facilities and impacts to the North New River Canal make retaining the existing drainage system impractical. SR-84 will be reconstructed as a four-lane facility (two 12-foot lanes in each direction), with Type F curb and gutter on the outside and an 8-foot shoulder (4-foot paved) on the inside. The curb and gutter is necessary to contain roadway drainage within the right of way, to allow for a pedestrian/bicycle path on the outside between Davie Road and SR-7, and to reduce clear zone requirements.

SR-84 will generally maintain its current profile wherever possible in order to maintain access to existing driveway/access points. It will also be located on the outside of the I-595 mainline ramps and bypass ramps in order to accommodate a continuous 4-foot undesignated bicycle lane along the outside, sidewalk, and access to adjacent properties. One exception where SR-84 cannot be maintained on the outside occurs in the westbound direction between Pine Island Road and Nob Hill Road, due to the limited space adjacent to the North New River Canal and the need for braiding the I-595 off-ramp with the SR-84 on-ramp in this location. The improvements to westbound SR-84 will likely require reconstruction of the intersections at SW 136th Avenue, Flamingo Road, Hiatus Road, Nob Hill Road, Pine Island Road, University Drive, and Davie Road. Currently, SR-84 ends to the east of Davie Road and EB traffic is forced onto the I-595 mainline. SR-84 will be extended through the Florida's Turnpike and SR-7 interchanges, and a continuous connection will be required to eliminate local traffic having to enter onto the I-595 mainline.

### 1.2.8 Sound Barriers

The provision of sound barrier walls at 13 locations has been recommended to provide noise abatement for 21 residential communities throughout the corridor. The walls will vary in height and type from 8 foot shoulder mounted barriers to 22 foot ground mounted barriers as provided in the PD&E Study documentation and subsequent refinement under the Design Change and Construction Advertisement reevaluations. As the project design progresses, the sound barriers will be reanalyzed as necessary for feasibility and reasonableness to re-establish barrier height and length. Refer to Section 16.4 for further information.

### 1.2.9 New River Greenway

Broward County has developed its Greenways System plan to connect all major neighborhoods within the County using travel ways designed for non-motorized transportation modes. The countywide Greenways System consists of bicycle and equestrian paths, nature trails, and waterways. Portions of SR-84 and the I-595 crossroads have been designated as major components of this Greenways System.

As part of the I-595 improvements and in a Memorandum of Agreement (MOA) with Broward County, FDOT has committed to construct a concrete, bi-directional mixed use path within the project limits adjacent to the NNRC from 136$^{th}$ Avenue to approximately 3000 feet east of SR-7. The Greenway is to be constructed within the SFWMD existing right of way. The recreational path will leave the project corridor at University Drive, head south to Nova Drive and re-enter the corridor at Davie Road. The portion of the Greenways System between University Drive and Davie Road will be constructed by Broward County.

As part of the Greenways construction within the I-595 project limits, five (5) new bridges will be required over the NNRC and adjacent finger canals, as well as improvements to the existing bridge over the finger canal west of Flamingo Road.

The Concessionaire will be responsible for the design and construction of the Greenway path and bridges within the limits provided in the Indicative Preliminary Design. The Concessionaire will also be responsible for any required Section 4(f) project activities for any proposed modifications to the Greenway concept, and will be required to coordinate with the District Planning & Environmental Management Office on all Section 4(f) activities. Broward County will be responsible for the Greenways construction between University Drive and Davie Road; design, construction, and permitting of all Greenways landscaping and appurtenances, as well as the new pedestrian/bicyclist bridge over the NNRC east of SR-7; and the maintenance of the entire Greenways System after the Greenways construction has been accepted by Broward County and other project construction has been completed within the SFWMD right of way.

### 1.2.10 Right of Way

FDOT will acquire all right of way needed for the Project. Acquisition of additional right of way has been restricted to very narrow confines along the south side of eastbound SR-84 between 136th Avenue and Pine Island Road, and along southbound Florida's Turnpike south of I-595. As indicated in previous sections, during the PD&E process every effort was made to minimize impacts through alternative designs and design criteria variations and exceptions in order to protect the Section 4(f) lands and the pristine waters and sensitive environmental features adjacent to the corridor. Right of way needs and costs associated with offsite stormwater management for the corridor stormwater runoff have been substantially reduced through the successful negotiation of offsite drainage agreements with Lago Mar Golf Course and Pine Island Ridge Golf Course. Another golf course along the corridor, Arrowhead Golf Course, opted to sell the property to FDOT rather than execute a drainage agreement. The drainage work within Lago Mar Golf Course and Pine Island Ridge Golf Course has already begun and is expected to be completed by September 2009. The Arrowhead Golf Course construction work will begin in August 2009. The additional right of way acquisition required for drainage conveyance from the corridor to the golf courses has been limited to narrow easements within select properties. Right

of way requirements will be refined as part of the Corridor Master Plan development and finalized as part of the Final Design phase. Refer to Sections 1.3.1.4, 3.6 and 15.0 for further information.

### 1.2.11 Work Breakdown Structure / Project Zones

In order to expedite construction, the Project has been divided into 9 zones to be constructed by as many as 6 separate construction teams. **Refer to Exhibit F for the project zones diagram**.

Each of the 9 zones will be further divided into 3 to 4 phases of work (generally starting from SR-84 north and south of I-595 and working toward the I-595 median). Initial construction activities include the New River Greenway, the Interim Transportation Management System (ITMS), and select sound barriers, which will be followed by major road and bridge construction in Zones 5, 7 and 2, respectively. **Refer to Section 4.3.2 of the Concessionaire Project Management Plan (Exhibit G) for more detailed information on the prioritization, sequencing and components of the phased construction within the 9 zones**.

## 1.3 PROJECT AGREEMENTS

### 1.3.1 Project Agreements in Place

#### *1.3.1.1 FHWA Oversight*

The Project is on the Interstate system and thus is subject to full FHWA oversight in accordance with the agreement between FHWA and FDOT.

#### *1.3.1.2 FDOT D4 / FTE – Turnpike Interchange*

As the proposed improvements and operations and maintenance required at the I-595 / Florida's Turnpike interchange overlap between the jurisdiction of FDOT D4 and Florida's Turnpike Enterprise (FTE), funding and oversight authority for the Project will be provided by different sources. As established through the development of the Financial Plan and Contract Documents, FTE (as a separate district within FDOT) has committed funds to the Project and will install, test, operate and maintain all express lane tolling equipment, manage all tolling customer services and toll violation enforcement, and continue to operate and maintain the Florida's Turnpike mainline facility.

#### *1.3.1.3 Concession Agreement*

On March 3, 2009, FDOT signed a P3 agreement with I-595 Express, LLC, which will serve as the Concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the Project through the 35-year agreement term. The agreement consists of the following Contract Documents **(hyperlink provided in Exhibit B):**

- Volume I – Concession Agreement (including Appendices)
- Volume II – Technical Requirements
    - Division I – General Requirements and Covenants
    - Division II – Special Provisions
        - Section 1 – Project Description
        - Section 2 – Project Requirements and Provisions for Work
        - Section 3 – Design and Construction Criteria
            - Attachment 1 – ITS Deployment Requirements
            - Attachment 2 – FTE's Tolling Infrastructure Support Requirements
            - Attachment 3 – Concessionaire CEI Requirements

  - Section 4 – Operations and Maintenance Requirements
  - Section 5 – Handback Requirements
  - Section 6 – Value Added Specifications
- Volume III – Additional Mandatory Standards

#### *1.3.1.4 OffSite Drainage Agreements*

FDOT has acquired permanent easement drainage rights in exchange for financial compensation and renovation improvements with the following two golf courses along the I-595 corridor:

- Lago Mar Golf Course – north of I-595 east of 136th Avenue
- Pine Island Ridge Golf Course – south of I-595 east of Nob Hill

These offsite drainage agreements are mutually beneficial to all parties, and have resulted in substantial time and cost savings for the Project due to a large reduction in drainage right of way needs and/or relocation requirements.

#### *1.3.1.5 Tree Relocation JPA's*

In January and February 2009, FDOT executed separate joint participation agreements (JPA's) with Broward County, the City of Plantation and the Town of Davie to relocate healthy, desirable trees that will be impacted by the project improvements **(hyperlinks to the Tree Relocation JPA's are provided in Exhibit B)**. The County and municipalities will be responsible for the development of a tree relocation plan, obtaining the necessary permits, relocation and maintenance of the trees. The FDOT will compensate the County and municipalities for the work as described in the scope of services.

#### *1.3.1.6 FDOT / Broward County New River Greenway MOA*

On May 22, 2009, FDOT and Broward County executed a Memorandum of Agreement (MOA) for the construction and maintenance of the New River Greenway (**hyperlink provided in Exhibit B)**. The New River Greenway, a component of the Broward County Greenways System, will be constructed as part of the initial construction activities on the Project. The Greenway will consist of a bi-directional mixed use path (for pedestrians and bicycles) that will run within the project limits from 136th Avenue to just east of SR-7.

As part of the agreement, FDOT will fund a portion of the Greenway, and will design and construct the Greenway path from 136th Avenue to University Drive, from Sewell Lock to SR-7, and from east of SR-7 to Red Road. The County will be responsible for funding and constructing all landscape and hardscape components of the Greenway, and for maintaining the entire Greenway upon completion and acceptance of the Greenway path construction.

#### *1.3.1.7 Project Commitments*

The series of project commitments established during the I-595 study and permitting process between FHWA, FDOT D4, and various agencies having jurisdiction over facilities or resources adjacent to the I-595 corridor are referenced in Section 1.1.4.

### 1.3.2 Future Agreements

#### *1.3.2.1 Utility Agreements*

Utility agreements between the Concessionaire and the individual Utility Agency Owners will be required for various utility relocations within the corridor. The Concessionaire will establish these agreements to document known utility conflicts, resolutions, responsible parties, utility work durations, costs and other information pertinent to the construction of the Project.

#### *1.3.2.2 FDOT / County I-595 Express Bus System JPA*

To initiate Bus Rapid Transit (BRT) within the I-595 corridor, FDOT D4 and Broward County are currently finalizing a Joint Participation Agreement (JPA) for FDOT to provide capital funding to Broward County for infrastructure associated with operating the I-595 Express bus system that may include buses, park and ride lots and enhancements, signage, shelters, stops, and ADA access and pedestrian facilities. The initial JPA will be supplemented and amended to address operations and maintenance costs and responsibilities of both parties. Startup for the transit service is scheduled for Summer 2010 before the I-595 construction is complete, and will be enhanced upon the opening of the express lanes.

#### *1.3.2.3 Landscaping / Lighting Agreements*

Landscaping and lighting agreements will be established as necessary between the Concessionaire, Broward County, and/or various municipalities for any required improvements and/or maintenance within the project limits that is not currently within the jurisdiction of FDOT or defined under current agreements between FDOT, the County and municipalities.

### 1.3.3 Management of Agreements

The management of the agreements will be the responsibility of all agreement parties, unless specified otherwise within the agreements. The CMT will be responsible for the management of the agreements on behalf of FDOT D4, and I-595 Express, LLC will be responsible for management of the agreements on behalf of the Concessionaire team. All agreements will be enforced through subsequent phases of the Project where applicable and any required transfer of specific management responsibilities will be coordinated well in advance of subsequent project phases.

# 2.0 PROJECT ORGANIZATIONAL STRUCTURE, ROLES, RESPONSIBILITIES, AND STAFFING

## 2.1 CORRIDOR MANAGEMENT TEAM (CMT)

The Project will be managed locally by the I-595 CMT, comprised of integrated FDOT and consultant staff. The CMT will have access to the resources of FDOT D4, FDOT Central Office and the FHWA Florida Division Office as required. **Refer to Exhibit H for the Corridor Management Organization Chart.**

The CMT includes the following key staff:

**FDOT Management Team**

- FDOT I-595 Project Manager
- FDOT Construction/Operations Project Manager
- Legal / Finance Staff
- Public Information Staff

**Planning / Design**

- FDOT Senior Support Staff
- Corridor Design Consultant (CDC)
- CDC Senior Support Staff

**Construction**

- Oversight CEI Consultant (OCEI)
- OCEI Consultant Project Engineers

**Operations and Maintenance (O&M)**

- FDOT Operations and Maintenance Support Staff

### 2.1.1 CMT Roles and Responsibilities

The CMT will oversee all administrative, technical, legal and finance activities associated with the Project, including public involvement, agency coordination/agreements and partnering, as well as the design, right of way, permitting, utility relocation, construction, and operations and maintenance (O&M) of the Project. The roles and responsibilities of the key CMT members are described below.

#### *2.1.1.1 FDOT Management Team*

**I-595 Project Manager**

The I-595 Project Manager will function as the FDOT Senior Project Manager and FHWA point of contact through the completion of the Project. The I-595 Project Manager will provide direct oversight of the Concessionaire, FDOT Senior Support Staff, and the CDC, and will provide administrative and technical management of the Concessionaire and CDC contracts. The I-595 Project Manager will be the lead decision making authority on the CMT, will be the primary liaison to the Executive Oversight Committee (EOC), and will be the lead FDOT representative for all external communication, coordination and agreements.

**Construction/Operations Project Manager**

The Project Construction/Operations Project Manager will work closely with the I-595 Project Manager in coordination with FHWA for the construction and O&M issues on the Project. The Project Construction/Operations Project Manager will be responsible for the direct supervision of the Oversight CEI Consultant (OCEI), and will provide the administrative management of the OCEI contract, with emphasis on quality, performance, and adherence to cost and schedule requirements. The Construction/Operations Project Manager will also support the I-595 Project Manager in management of the Concessionaire contract, decision making and coordination with the EOC, external communication, coordination and agreements.

**Legal / Finance Staff**

The CMT Legal / Finance staff will support the EOC and the FDOT Management Team in the legal interpretation of the Contract Documents, as well as implementation of scope, cost and schedule changes requiring contractual and/or financial adjustment of the Contract Documents and/or programmed cash flows.

**Public Information Staff**

The CMT Public Information staff will provide support to FDOT D4 in conducting the public information program currently underway for the Project, including conducting the initial public information meeting prior to initiating construction activities, public hearings, MPO Commission and Committee meetings, elected and appointed officials briefings, special interests or stakeholder group meetings, public kick-off meetings or workshops, agency information meetings, and other public information meetings. The CDC Public Information Consultant (PIC) will also be responsible for preparing the project Community Awareness Plan (CAP) and the project newsletter. The PIC will be responsible for the day to day construction notifications; will work to advise the local press and community of the project activities; and will serves the project spokesperson and "face" of the Project to the community during the Construction phase. The FDOT 4 District Public Information Office will provide oversight of all public involvement activities.

#### *2.1.1.2 Planning/Design*

**Corridor Design Consultant (CDC)**

Functioning as an extension of FDOT D4 staff, the CDC provides management and technical planning and design support to the FDOT Management Team and the FDOT Senior Support staff. The CDC has and will be responsible for the following:

- Preparing PD&E Study documents and subsequent re-evaluation documentation
- Performing engineering support services including subsurface investigations, right of way needs analysis, and cost estimating
- Preparing and acquiring the corridor conceptual Environmental Resource Permits (ERP's) and subsequent assistance to the Concessionaire in the development of necessary permit modifications
- Assisting FDOT D4 in design management oversight, including the resolution of technical issues and providing design reviews to ensure Concessionaire's compliance with the Contract Documents
- Developing Technical Requirements for the P3 procurement documents, including the preparation of the Indicative Preliminary Design
- Providing oversight of the Concessionaire's utility management and coordination efforts
- Developing and maintaining the project website and design management team site
- Assisting FDOT D4 in the development and implementation of a community involvement public information program, and providing support for all public involvement activities

- Assisting FDOT D4 in project coordination with the CBE-WTAA, FHWA, state and local agencies, and other stakeholders
- Assisting FDOT D4 in the preparation and updating of the PMP.

#### *2.1.1.3 Construction*

**Oversight Construction Engineering and Inspection (OCEI)**

FDOT D4 will utilize an OCEI firm to manage, monitor, and administer the construction work for the Project. The OCEI will be lead by a Resident Engineer who will be responsible for the oversight of the construction administration, inspection, materials testing, and auditing of the Concessionaire's processes for compliance with the Contract Documents. The Resident Engineer will also provide the administrative and technical management of the OCEI contract, and will be responsible for the internal and external coordination and progress reporting for the Project.

The OCEI will be responsible for validating the Concessionaire's Equal Employment Opportunity (EEO) compliance and auditing the Concessionaire's On the Job Training (OJT) Program to ensure compliance with the project requirements. The OCEI shall provide validation, oversight, and construction inspection to assess whether the Concessionaire is performing the work in accordance with the Contract Documents, and that the facility will meet the end-user's requirements. The OCEI effort during construction will focus on materials and inspection where non-compliance could affect safety, governmental permits or the long term asset value at hand-back. The OCEI will also be responsible for auditing the Concessionaire's compliance with environmental permits and commitments, and assisting the FDOT Management Team in claims and disputes resolution.

#### *2.1.1.4 Operations and Maintenance*

During the Construction phase of the Project, the OCEI will oversee the O&M and self-reporting responsibilities of the Concessionaire. During the Operating Period, oversight roles will be transferred to the local FDOT offices for management. It is anticipated that the Fort Lauderdale Operations Center will be the lead for oversight, with support from FTE for toll-related operations and the FDOT Traffic Operations office for ITS, freeway operations and incident management oversight support.

### 2.1.2 Project Office Space/Locations/IT and Communications

The Project will be managed from the field office leased by the Concessionaire within the project limits on Eastbound SR-84. The field office contains approximately 30,000 square feet of office space to accommodate the Concessionaire, the OCEI, FDOT and CDC personnel. The CMT office space will be separate from the Concessionaire's offices. The CMT will manage and maintain a centralized project control system that will collect, catalog and report project information. The Concessionaire will manage and maintain its own database system.

## 2.2 EXECUTIVE OVERSIGHT COMMITTEE (EOC)

The Executive Oversight Committee (EOC) has been established to provide direction on policy related issues and act as the final appeal authority for conflict resolution on the Project. The EOC members include:

- FHWA Major Projects Engineer
- FDOT D4 Secretary
- FDOT D4 Director of Transportation Development
- FDOT D4 Director of Operations.

## 2.3 FHWA PARTICIPATION

### 2.3.1 FHWA Roles and Responsibilities

The FHWA project responsibilities will be administered through the FHWA Major Projects Engineer, who will serve on the EOC and be the FHWA point of contact for the CMT. The FHWA Major Projects Engineer will be responsible for project actions and approvals, in coordination with the FHWA Florida Division and Headquarters staff. Each element of the Project will be managed as full oversight by FHWA. The FHWA Major Projects Engineer or her designee will:

- Participate as a member of the EOC
- Participate in reviews and coordinate FHWA reviews, concurrence and approvals with the Division and Headquarters staff. Reviews are to include, but may not be limited to:
    - Project Management Plan and Updates
    - Initial Financial Plan and Annual Updates
    - Procurement Documents
    - Contract Documents and Supplemental Agreements
    - Independent Estimates
    - Typical Section Package
    - Pavement Design Package
    - Design Exceptions
    - Bridge Concept Reports
    - Design plans phase reviews
    - Special Provisions
    - Notice to Proceed 1 (NTP 1), Notice to Proceed 2 (NTP 2), Substantial Completion and Final Acceptance.
- Keep current on project prosecution, progress, and other issues.
- Provide briefings for, and otherwise coordinate with FHWA Division Administrators, the Major Projects Team, and other program offices as necessary.
- Be apprised of, and assist with any changes affecting the NEPA approval and assure mitigation commitments are implemented.
- Coordinate between the CMT, EOC, FHWA and other Federal agencies as necessary for resolution of elevated project issues.

### 2.3.2 FHWA Approval and Process Participation

In addition to the anticipated FHWA project-specific actions and reviews, concurrence and approvals identified in Section 2.3.1, **a hyperlink to the FHWA Responsibilities Matrix is provided in Exhibit B.**

### 2.3.3 FHWA Staffing

The FHWA Major Projects Engineer may draw from additional FHWA resources as deemed necessary to support the Project. **Refer to Exhibit I for the FHWA Florida Division Organization Chart.**

## 2.4 FDOT PARTICIPATION

### 2.4.1 FDOT Roles and Responsibilities

FDOT D4 will provide contract administration, management, and quality assurance compliance reviews of all Concessionaire work associated with the development and preparation of the contract plans and construction of the project improvements, shop drawing concurrence, OCEI services, oversight of O&M responsibilities and self-reporting, and coordination with FHWA, state and local agencies, and other stakeholders. The roles and responsibilities of FDOT D4 as the project administrator have been described in Sections 2.1 and 2.2.

The FDOT Central Office will be consulted as required and will be involved in the oversight and review process of the Project in accordance with the FDOT Plans Preparation Manual (PPM), with emphasis on design reviews and coordination of structural issues for Category 2 structures.

FTE (as a separate district within FDOT) will participate in the review of Concessionaire phase submittals, the coordination of construction issues related to on-going FTE projects and assets in the vicinity of the I-595 corridor, and will install, test, operate and maintain all express lane SunPass tolling equipment, manage all tolling customer services and toll violation enforcement, and continue to operate and maintain the Florida's Turnpike mainline.

### 2.4.2 FDOT Staffing

FDOT D4 will utilize in-house, CDC, and OCEI staff for the management of the Project. The CMT staff, including FDOT D4, CDC, and OCEI, will be fully integrated for multi-disciplined technical, administrative, and functional support of the Project. The CMT has the ability to augment staff as the need arises to accommodate the Concessionaire's schedule and management structure. **Refer to Exhibit J for the FDOT D4 Organization Chart.**

Staffing requirements for the FDOT Central Office and FTE project involvement will be determined by the respective offices.

## 2.5 CONCESSIONAIRE TEAM

The Concessionaire, I-595 LLC, a consortium created by ACS Infrastructure Development, has established a management team to design, build, finance, operate and maintain the Project for a 35 year concession term. During the concession term, the Concessionaire will operate and maintain: (i) the existing I-595 general purpose lanes and associated roadway infrastructure from the start of construction and (ii) the project's capital improvements (with the exception of the toll systems) from the date the project construction is substantially complete. In addition, the Concessionaire will be responsible for the maintenance of all physical elements of the facility and ultimately handing back the facility in a manner that is compliant with the hand-back standards and requirements described in the Concession Agreement.

The project management team organization consists of:

- Concessionaire (I-595 Express, LLC)
- O & M Contractor (Jorgensen Contract Services, LLC)
- Design-Build Contractor (Dragados USA)
- Designer (AECOM Technology Corporation, Inc.)
- Construction Engineering and Inspection (CEI) Team (HNTB/Calvin, Giordano & Associates)

**Refer to Exhibit G for the Concessionaire Project Management Plan, which details the roles, responsibilities and work to be accomplished by each identified team member, as well as a detailed description of the contractual organization and team organizational charts.**

## 2.6 OTHER STAKEHOLDER ENTITIES

It is important that any publicly-funded transportation project have the support of the public agencies charged with reviewing, approving, constructing, and/or financing the project. Due to the extensive coordination effort with state and local government agencies and organizations during the I-595 corridor study phase, the Master Plan Locally Approved Alternative (LPA) was included in the Broward County MPO 2030 Long-Range Transportation Plan, and numerous project commitments and concept modifications were developed as a result of agency and public input and recommendations.

During the Design and Construction phases, the CMT and the Concessionaire will continue to coordinate with, and solicit input from the following stakeholder entities to:

- keep stakeholders informed on the status of the Project and key coordination issues;
- ensure widespread acceptance of the Project;
- evaluate any modifications in the planned short and long term local and regional transportation network that could potentially influence the I-595 corridor;
- establish and execute the required utility, partnering and right of way agreements; and
- ensure project commitments are achieved and the required project permits are obtained expeditiously.

**Regional**

- South Florida Regional Planning Council
- South Florida Regional Transit Authority
- South Florida Regional ITS Coalition
- South East Florida Transportation Council

**County**

- Broward County Public Works Department
- Broward County Traffic Engineering Division
- Broward County Traffic Management Center (TMC)
- Broward County Parks and Recreation Department
- Broward County Transit
- Broward County Metropolitan Planning Organization
- Broward County Technical Coordinating Committee
- Broward County Community Involvement Roundtable
- Broward County Aviation Department
- Broward County Emergency Management Office
- Broward County Fire Rescue
- Broward County Commissioners (Districts 1-9)
- Port Everglades

**Municipalities**

- City of Ft. Lauderdale

- Town of Davie
- City of Plantation
- City of Sunrise
- City of Weston
- City of Dania Beach
- Unincorporated Broward County

**Utilities**

- Refer to the utility agencies listing provided in Section 16.1.

**Permitting Agencies**

- Broward County Environmental Protection Department (BCEPD)
- Florida Department of Environmental Protection (FDEP)
- South Florida Water Management District (SFWMD)
- United States Army Corps of Engineers (USACOE)
- Federal Aviation Administration (FAA)
- United States Coast Guard (USCG)
- Central Broward Water Control District (CBWCD)
- Old Plantation Water Control District (OPWCD)
- Plantation Acres Improvement District (PAID)
- Tindall Hammock Irrigation & Soil Conservation District (THISCD)

**Homeowners Associations/Communities**

- The Southwest Coalition of Homeowners Associations
- Broadview Estates
- Plantation Harbor
- Plantation Acres
- Lakeview Estates
- Isla del Sol
- Plantation Point
- Manaranda Village
- The Trellises
- Davide Isles
- Jacaranda Villas
- Hawks Landing
- Everglades Mobile Home Park
- Arrowhead
- Valencia

- Lauderdale Little Ranches
- Park City Estates
- The Palms
- Paradise Village
- Kings Manor
- New River Cove
- Hacienda Flores

**Others**

- Freeway Incident Management Team
- I-595 Road Rangers
- Florida Highway Patrol Troop L
- Local law enforcement and fire rescue.

### 2.6.1 Staffing Impacts

The Project should pose no significant impact to the staffing of other stakeholder organizations. The CMT will work closely with the regulatory and reviewing agencies and the Concessionaire in identifying review schedule timelines well in advance of all project submittals.

## 2.7 RULES OF OPERATION

The project decisions rendered by the CMT will be on a consensus basis. The I-595 Project Manager and the Construction/Operations Project Manager will consult with FDOT design and construction advisory staff within the CMT, which includes the following:

- FDOT D4 Design Engineer
- FDOT D4 Construction Engineer
- FDOT D4 Maintenance Engineer
- FDOT D4 Traffic Operations Engineer
- Ft. Lauderdale Operations Engineer

If consensus cannot be reached by the CMT, issue resolution will be elevated as follows:

- Issues that cannot be resolved at the CMT advisory staff level will be elevated to the EOC.
- Policy issues that cannot be resolved at the EOC level will be elevated to the FHWA Division Office and/or Headquarters for resolution.

The decisions rendered by the CMT will not supersede current FHWA and FDOT policies and procedures. The CMT will be proactive with regard to scheduling time for resolution of issues to minimize project schedule impacts.

## 2.8 DISPUTES RESOLUTION AND ELEVATION PROCEDURES

All issues and disputes will be resolved at the appropriate management level and shall follow the provisions of Article 25 of the Concession Agreement. Issues resolution will be typically initiated at the I-595 Project Manager or the Construction/Operations Project Manager level. If the dispute cannot be resolved, it will be elevated to the next management level. Issues which require additional resolution shall be presented to the Dispute Review Board (DRB).

The FDOT and Concessionaire shall establish the DRB to provide special expertise and assistance, and facilitate the timely and equitable resolution of disputes between the FDOT and the Concessionaire as set forth under Section 25.2 of the Concession Agreement and the DRB Agreement. Either FDOT or the Concessionaire may refer a dispute to the DRB. Referral to the DRB is to be initiated as soon as it appears that the normal dispute resolution effort is not succeeding. FDOT and the Concessionaire agree that the submission of any unresolved dispute to the DRB is a condition precedent to FDOT or the Concessionaire having the right to proceed to arbitration or litigation of such unresolved dispute. FDOT's Claim Review Committee will not entertain any issues on the Project. The recommendations of the DRB or Regional DRB will not be binding on either FDOT or the Concessionaire.

Disputes arising after Final Acceptance of the project construction (excluding disputes relating to latent defects arising after Final Acceptance related to work performed prior to Final Acceptance and for Value Added Specifications) will be submitted to the Regional DRB in accordance with the procedures set forth in Appendix 9-C of the Concession Agreement. Disputes related to the performance of the "value added" specification requirements set forth in Vol II Div II Sect 6 of the Contract Documents will be submitted to the Statewide DRB for Valued Added Specifications in accordance with the procedures established by FDOT.

## 2.9 LEGAL AND AUDIT SERVICES

FHWA and FDOT will coordinate and/or administer all required legal and audit services for the Project. CMT legal staff will provide support for any interpretations and changes to the Contract Documents.

# 3.0 PROJECT PHASES

## 3.1 OVERVIEW

The goals of the CMT are: 1) the timely and cost-effective delivery of the project improvements in accordance with the established phasing plan, and 2) the safe and efficient operations and maintenance of the I-595 mainline and express lanes, SR-84 and ramps in a manner consistent with the requirements of Vol II Div II Sect 4 of the Contract Documents.

The overall project management strategy of the CMT will provide for the phased and integrated design and construction of the project zones, while maintaining the integrity and consistency of the corridor. Throughout all phases of the Project, an interactive partnering approach between the CMT and the Concessionaire will be utilized to assist the Concessionaire in the efficient and progressive development of the construction plans, and subsequent construction, operations and maintenance activities. This will be accomplished through the active and continual participation of FDOT D4, CDC and OCEI management, design, construction, maintenance and operations staff throughout the project term.

The following major milestones have been identified for the Project per phase:

**Planning**

- Location Design Concept Approval (received June 29, 2006)
- Design Change Reevaluation (FHWA concurrence November 28, 2007)
- Construction Advertisement Reevaluation (FHWA concurrence April 8, 2008)

**Procurement**

- Issue D/B/F/O/M Request for Qualifications (October 1, 2007)
- Shortlist of concessionaire teams (December 3, 2007)
- Issue Final Request for Proposals (April 18, 2007)
- Issue Notice of Intent to Award to ACS Infrastructure Development (ACSID) (October 24, 2008)
- Concession Agreement execution / Issue Notice to Proceed 1 (NTP 1) for design work (March 3, 2009)

**Corridor Master Plan / Design**

- Conceptual Individual Environmental Resource Permit approval (January 13, 2009)
- Corridor Master Plan completion and concurrence (Summer 2009)
- Secure individual construction permit modifications (zone dependent)
- Utility relocation and clearance (zone dependent)
- Release plans for construction (zone dependent)

**Right of Way**

- Right of Way certification (no later than October 2010 corridor-wide)

**Construction**

- Initiate advanced construction activities (June 15, 2008)
- Interim Milestone works (8 contractual milestones):

1. ***Sound Barriers Group A*** – ground mounted barriers along Florida's Turnpike north of I-595, ground mounted barriers north of westbound SR-84, and New River Greenway (within 910 days from NTP 1)
2. ***Ramp T-16*** – westbound I-595 ramp to northbound Florida's Turnpike (within 910 days from NTP 1)
3. ***WB Braid*** – westbound I-595 braided ramp and westbound SR-84 between Pine Island Rd. and Nob Hill Road (within 910 days from NTP 1)
4. ***EB Bypass / Braid*** – eastbound I-595 braided / bypass ramp system between Nob Hill Road and University Drive (within 910 days from NTP 1)
5. ***Sound Barriers Group B*** – ground mounted sound barriers along Florida's Turnpike south of I-595 and ground mounted barriers south of eastbound SR-84 (within 1365 days from NTP 1)
6. ***SR-84 Eastbound*** – continuous eastbound SR-84 from Sewell Lock to the eastern project limits (within 1365 days from NTP 1)
7. ***SR-84 Westbound*** - continuous westbound SR-84 from Sewell Lock to the eastern project limits (within 1365 days from NTP 1)
8. ***Express Lanes*** – including revenue collection, with or without access to Florida's Turnpike (within 1820 days from NTP 1)

- Substantial Completion (within 1820 days from NTP 1)
- Final Acceptance (90 days after Substantial Completion)

**Operations & Maintenance**

- Issue NTP 2 for maintenance O&M work (July 31, 2009)
- Handback Renewal Work Plan (5 years prior to end of contract term)
- End of contract term / handback of Project to FDOT (March 2, 2044)

Strategy, control, documentation and integration of the various management components to achieve these milestones on a timely and cost-effective basis are described throughout the PMP.

Sections 3.2 – 3.8 describe the major phases of the Project. All phase activities will be subject to full FHWA oversight. The implementation schedule for the design and construction phases for each project zone will be in accordance with the work breakdown structure and sequencing priorities as described under Section 1.2.11.

### 3.2 PLANNING

The I-595 PD&E Study was completed, and Location and Design Concept Approval (LDCA) from FHWA was received on June 29, 2006, followed by FHWA concurrence with the Design Change and Construction Advertisement Reevaluations on November 28, 2007 and April 8, 2008, respectively. Any required re-evaluation of previously approved environmental documentation will be the responsibility of the Concessionaire and will be monitored by the CMT throughout the Corridor Master Plan and Design phases of the Project. All reevaluation efforts will be completed in accordance with the FDOT PD&E Manual, Volume 1 Chapter 11 – Re-evaluations.

### 3.3 D/B/F/O/M PROCUREMENT

The process to procure a concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the Project culminated with the execution of the Concession Agreement on March 3, 2009. Refer to Section 5 for a detailed description of the procurement process.

## 3.4 CORRIDOR MASTER PLAN (CMP)

Location Design Concept Approval by FHWA enabled the further refinement of the preferred alternative for the I-595 corridor by the CDC, followed by the development of the corridor Indicative Preliminary Design (IPD). The purpose of the IPD was to refine the various design components in sufficient detail to validate the PD&E concept, identify any required updates to previous environmental documentation, establish the geometric requirements for integrating the roadway and transit improvements into the corridor, define right of way, utility and permitting requirements, and establish a logical and comprehensive corridor plan prior to the D/B/F/O/M advertisement of the Project.

As part of their technical proposal, the Concessionaire developed a preliminary Corridor Master Plan (CMP) package based on the concept of the IPD and design and construction criteria stipulated in the Request for Proposal (RFP) documents. The Concessionaire is currently refining the CMP for review and concurrence by the CMT. Refer to Vol II Div II Sect 2.I.1.b of the Contract Documents for a detailed description of the CMP package content. The purpose of the CMP development is to ensure the Concessionaire's understanding and compliance with the Technical Requirements of the Contract Documents prior to proceeding with the development of the Final Design plans.

### 3.4.1 Conceptual Environmental Resource Permits (ERP's)/Construction Permits

A SFWMD Conceptual Individual Environmental Resource Permit (ERP) package has been prepared by the CDC and approved for the Project. In addition to the SFWMD Conceptual Individual ERP, conceptual and/or master plan permits have been prepared and approved for the local drainage districts with permitting jurisdiction over portions of the Project limits, including Broward County Environmental Protection Department (BCEPD), Central Broward Water Control District (CBWCD), and Tindall Hammock Irrigation and Soil Conservation District (THISCD).

During development of the CMP and conceptual permit applications, permit applications were also developed, submitted, and approved for the SFWMD Right of Way Occupancy Permit, United States Army Corps of Engineers (USACOE) Dredge and Fill Permit, and United States Coast Guard Bridge Permit. The conceptual ERP and construction permits were essential in expediting the Project schedule in providing for:

- 'Locked in' permitting requirements and agreements for the corridor that ultimately streamline the final design and permitting process
- Permitting flexibility for the entire corridor by allowing for permit compliance on a corridor-wide basis
- Risk reduction and associated cost benefits to FDOT during the final design and construction process.

## 3.5 FINAL DESIGN

Upon CMT concurrence with the CMP, the Concessionaire will proceed with the development and submittal of the Final Design plans. The Concessionaire's design team, led by AECOM, will be responsible for the day-to-day management and implementation of all final design phase work tasks and coordination (**refer to the Project Work Plan [Appendix 11.6 of the Concessionaire Project Management Plan – Exhibit G] for further information on the Concessionaire's design management approach and coordination plan**). In addition to the preparation of plans and specifications, key project activities during the Final Design phase include the preparation and execution of utility joint participation agreements for the advancement of utility relocations, acquisition of all required individual construction permits, and all associated inter-agency coordination.

In order to expedite the construction of the project improvements in accordance with the phased implementation plan, the Concessionaire will advance the design of various project components,

including the New River Greenways, select ground mounted sound barrier walls, the interim traffic management system (ITMS), utility relocations, and foundation plans for bridges, signing, signalization, lighting and ITS appurtenances. For many of the larger and more complex bridges, construction plans will be developed as component plan sets, with separate submittals for foundation, substructure and superstructure plans. Refer to the component submittal matrices (**Exhibits C-C2 of the Project Work Plan of the Concessionaire PMP**) for further information on the intended content of roadway and bridge component submittals.

In accordance with the requirements of Vol II Div II Sect 2.I of the Contract Documents, component submittals shall include all support information necessary to enable a complete review by the CMT. As a minimum, plans reviews will be conducted by the CMT at the 90% and Final component plans submittal phases. The CMT design review process is further described in Section 4.6.

The activities and certifications required to process the construction plans packages that comprise each zone will be in accordance with the Technical Requirements of Vol I and Vol II Div II Sects 1-3 of the Contract Documents.

## 3.6 RIGHT OF WAY

The project improvements will require narrow areas of right of way acquisition south of eastbound SR-84 between 136th Avenue and Pine Island Road, as well as acquisition along southbound Florida's Turnpike south of I-595. In order to minimize significant right of way needs to satisfy drainage requirements for the project improvements, FDOT has also acquired permanent easement drainage rights in exchange for financial compensation and renovation improvements with two golf courses along the I-595 corridor. Refer to Section 1.3.1.4 for more information on the offsite drainage agreements.

All right of way acquisition for the Project will be the responsibility of FDOT and will be ready for construction (right of way certified) by October 2010. For additional right of way needs identified by the Concessionaire above and beyond the right of way that was identified in the development of the IPD concept, the Concessionaire will be responsible for the preparation of parcel sketches and legal descriptions for the impacted parcels as well as any associated compensation to the property owners and all costs of acquisition.

Vol II Div II Sect 2.C of the Contract Documents describes the anticipated right of way clearance dates for the various areas of acquisition. In accordance with the Contract Documents, the Concessionaire shall not conduct construction activities within the areas of easement/acquisition prior to receipt of a right of way clear letter from FDOT.

The Right of Way phase will be active concurrently with the CMP and Final Design phases of the Project. In collaboration with the CMT, the FDOT D4 Right of Way Office will provide the review and oversight of all right of way activities for the Project, including map preparation, appraisals and acquisition. The CDC has prepared the control surveys and the corridor Genesis Map, which depicts the historic baseline, sectional lines, plats, found monuments, calculated corner locations, condominium limits, topography, and researched existing rights of way and easements along the corridor. The CDC has also developed the Title Search Map and Report, and the legal descriptions and parcel sketches for all parcels to be impacted by the project.

Parcel sketches, legal descriptions and Right of Way Maps are currently being refined and finalized by FDOT and the CDC to reflect the latest Concessionaire design, and the appraisal and acquisition process is ongoing. All mapping will be completed in accordance with the checklists and requirements of the FDOT D4 Right of Way Mapping Guidelines and General Information and the FDOT Right of Way Mapping Handbook.

Right of Way Certification will be executed by the FDOT D4 Right of Way Manager certifying that FDOT title to all right of way has been acquired, any displaced persons, businesses and personal property have been relocated, and all required demolition of structures and improvements have

been completed or specified for removal. Refer to Section 15.0 for further right of way information regarding the acquisition and certification process.

## 3.7 CONSTRUCTION

The Concessionaire will manage the construction of the corridor by segmenting the work areas into nine zones. The nine zones have been determined utilizing major cross streets on the corridor and do not include advanced construction activities. Advanced construction activities, initiated on June 15, 2009, include the construction of the Greenway along the North New River Canal, select ITMS work, select sound barrier wall construction and utility relocations. The Concessionaire has designated two teams to manage the zones and will select contractors to perform the work in each zone per the requirements in the Contract Documents when "Released for Construction" plans have been produced. The construction operations will be monitored by the Concessionaire in accordance with their approved Construction Quality Control Management Plan.

The OCEI and the FDOT Construction/Operations Project Manager will be responsible for the day to day management and administration oversight of the component plans submittals stamped "Released for Construction" (refer to Section 2.1 for OCEI and CMT roles and responsibilities). The OCEI will be involved in the design reviews leading up to the component submittals in order to become fully acclimated with the project zones prior to the Concessionaire's initiation of the construction operations.

Substantial Completion and Final Acceptance of the Project will follow the provisions of Section 4.10 of the Concession Agreement. Upon the CMT's final acceptance of the project construction, the Concessionaire will be required to submit a professionally endorsed composite set of as-built drawings for the entire Project, as well as a Final Estimates package for the construction work within 90 days after Final Acceptance.

Upon Final Acceptance, the Concessionaire will be entitled to Final Acceptance Payments and Adjustments as detailed in Section 4.10.4 of the Concession Agreement.

## 3.8 OPERATIONS AND MAINTENANCE

The goal of the CMT is to ensure that the I-595 mainline, SR-84, ramps, and the new express lanes system are managed, maintained and operated in a manner that is consistent with and satisfactory to FDOT in accordance with the Concession Agreement and Vol II Div II Sect 4 of the Contract Documents. From the date of NTP 2 and for the duration of the contract term, the Concessionaire will operate and maintain the Project within the applicable operation O&M limits, including (i) the existing I-595 mainline, SR-84 and associated roadway infrastructure, and (ii) the Project's capital improvements as detailed in Volume III – Additional Mandatory Standards - Exhibits 4.1 and 4.2 (with the exception of the express lanes toll system equipment) in the Contract Documents. In addition, the Concessionaire will be responsible for carrying out the maintenance of all physical elements of the Project and ultimately handing back the facility in a manner that is compliant with the Handback Requirements set forth in Vol II Div II Sect 5 of the Contract Documents.

The Concessionaire has developed their preliminary O&M Plan which includes the O&M Manuals for both the Construction and Operating Periods of the Project (**hyperlink to the manuals is provided in Exhibit B**). The final O&M Manuals for the construction period will be submitted prior to NTP 2. The final O&M Manuals for the Operating Period are to be submitted within 120 days of the anticipated Substantial Completion date of the project construction. The required content of the O&M Plan and associated manuals are detailed in Vol II Div II Sect 4.1.4 of the Contract Documents.

# 4.0 PROJECT QUALITY

## 4.1 GOALS AND OBJECTIVES

The overall goal of quality management for the Project is to ensure that all labor, services, equipment, materials, and deliverables provided by the Concessionaire are in compliance with the quality requirements of the Contract Documents and the associated Federal, state and local laws, rules, standards, policies and procedures. The program requirements for quality management involve quality standards and quality assurance and control plans in accordance with FDOT policies and procedures.

Adherence to these quality standards and plans relating to scope, schedule and cost control, work products, safety, and public trust and interest will be measured, controlled, and documented through scheduled plans and progress reviews, claims reviews, audits, progress meetings, public meetings, web site feedback, and performance evaluations as further described in this section and throughout the PMP.

## 4.2 QUALITY RESPONSIBILITY AND AUTHORITY

The Concessionaire will be responsible for the overall quality management of the Project, including professional quality, technical accuracy, and coordination of all surveys, designs, drawings, specifications, and other Concessionaire services rendered as part of this contract. The Concessionaire will be responsible for providing documentation of quality control (QC) compliance. The CMT will coordinate audit and/or oversight reviews that may be conducted by the FHWA and FDOT.

The Concessionaire's AECOM Design Manager will be responsible for assuring that the design review process is implemented in accordance with the Concessionaire Design Quality Management Plan (DQMP). **Refer to Exhibit B for a hyperlink to the Concessionaire DQMP.**

The Concessionaire's CEI will be responsible for monitoring and evaluating the acceptability of the Concessionaire's product and performance, and that the Concessionaire is in compliance with the Contract Documents and the Concessionaire Construction Quality Control Management Plan (CQCMP). **Refer to Exhibit B for a hyperlink to the Concessionaire CQCMP.** The Concessionaire is responsible for furnishing all labor, materials, equipment tools, transportation, and supplies required to complete the work in accordance with the Contract Documents and the established CQCMP, and for providing all required documentation of QC compliance.

The CMT will provide quality management oversight to ensure all required Concessionaire quality processes and procedures are in place in accordance with the Contract Documents. The OCEI and the FDOT 4 Materials Office will monitor the Concessionaire's work to determine the progress and quality of work.

Upon receipt of NTP 2, the Concessionaire will be responsible for the O&M on the Project for the Construction Period. The Concessionaire has included in Volume II Section 5 of the O&M Plan a Quality Management System defining the Concessionaire's self-monitoring process for the O&M work**.** Tables 4.1A and 4.2 of Vol II Div II Sect 4 of the Contract Documents include the assets to be maintained by the Concessionaire and the minimum performance requirements applicable during the Construction and Operating Periods, respectively. Further, the Concessionaire is required to respond to any incident, emergency or event with the appropriate qualified staff, equipment and support personnel such as Road Ranger Service Patrol, Service Incident Response Vehicle (SIRV), and Rapid Incident Scene Clearance (RISC) service required to meet the minimum performance requirements as detailed in Table 4.1A and 4.2 of Vol II Div II Sect 4 of the Contract Documents, and correct a failure to meet such minimum performance requirements within the required cure period.

## 4.3 QUALITY STANDARDS

The quality monitoring standards to be utilized by the Concessionaire include:

- Contract Documents
- FDOT Project Management Handbook
- FDOT Plans Preparation Manual (PPM)
- FDOT D4 Quality Control Plan
- FDOT Construction Project Administration Manual (CPAM)
- FDOT Standard Specifications for Road and Bridge Construction (Specifications)
- Concessionaire Quality Management Plans.

## 4.4 SCOPE MANAGEMENT / CONTROL

The work breakdown structure included in the Concessionaire's Project Management Plan will serve as the basis for defining the scope of work for each zone. The Concessionaire design and construction staff will collaborate with all appropriate project stakeholders on the development of the individual zone design scopes of work to ensure the scopes are consistent and comprehensive, enabling more effective control of the work.

Management and control of the scope of work for the design, construction, and O&M phases will involve continuous review of the work being performed, and monitoring/documenting the conformance with the contractual requirements through procedures described in this section and throughout the PMP. No changes to the scope or payment for work determined to be out of scope will be made without the appropriate supplemental agreement documentation and approval from FDOT as described under Section 5.10.

### 4.4.1 Operations and Maintenance

The scope of the O&M work to be completed by the Concessionaire will include:

- Providing for the maintenance and operations of all the existing assets and ITS devices within the O&M limits during the Construction Period;
- Providing for the maintenance and operations of the Project's assets and ITS devices within the O&M limits during the Operating Period;
- Providing for the renewal work of the Project's assets and ITS devices;
- Providing for the handback of the Project's assets; and
- Providing first responder incident/emergency response and emergency repair.

The Contract Documents require that the Project (with the exception of the express lanes, which will have hours of operation as set forth in Vol II Div II Sect 4.3.3.1 of the Contract Documents) must be available 24 hours per day, seven days per week, and every day of the year. The Concessionaire will provide the appropriate staff levels for these hours of operation and will be available to assume these responsibilities from the date of NTP 2.

## 4.5 QUALITY ASSURANCE / QUALITY CONTROL

### 4.5.1 Design

The Concessionaire has prepared a DQMP in accordance with the requirements of the Contract Documents that describes the personnel and procedures to be utilized to verify, independently check, and review all maps, design and shop drawings, specifications, and other documentation prepared as a part of the design. The DQMP also incorporates the management process for the

Project and how the checking and review processes are to be documented to verify that the required procedures are followed.

With each phase submittal, the Concessionaire must submit a Certificate of Compliance certifying that quality assurance and quality control procedures for the Project have been carried out, and the deliverable is in accordance with all applicable standards as outlined in the Contract Documents. The AECOM Design Manager must sign the statement certifying that the review was conducted. **For the Certificate of Compliance Form, refer to Exhibit B for a hyperlink to the Concessionaire DQMP.**

Each component plan to be released for construction must include a Statement of Design that documents assumptions, verifies consistency with components already constructed or to be constructed, and notes any deviations. The Statement of Design is listed on the calculations cover sheet. Any required modifications to the component construction due to subsequent design changes as the result of further design development will be solely the Concessionaire's risk.

### 4.5.2 Construction

The Concessionaire will be responsible for developing and maintaining a Construction Quality Plan in accordance with Section 105 of Standard Specifications which describes their quality control procedures to verify, check, and maintain control of key construction processes and materials. In addition, the Concessionaire will provide a quality assurance program to confirm that the quality control procedures are followed. The Concessionaire shall describe how the checking and review processes are to be documented to verify that the required procedures were followed.

The Concessionaire has submitted their Construction Quality Control Management Plan (CQCMP) and will submit the revised plan for CMT acceptance prior to NTP 2.

FDOT will maintain the right to inspect construction activities and request any documentation from the Concessionaire to ensure quality products and services are being provided in accordance with the FDOT's Materials Acceptance Program. The FDOT D4 Materials Office and the OCEI will perform independent verification sampling and testing for validation of the Concessionaire's work.

The Concessionaire's CEI will be required to ensure that construction is being performed in accordance with the Contract Documents through direct observation of construction operations that are underway, by examination of completed construction, by sampling and testing of materials, and by review of written and electronic records. It is the OCEI's responsibility to validate the contract work produced by the Concessionaire, and to substantiate the Concessionaire's conformance with the Contract Documents. **Refer to Exhibit B for the hyperlink to the OCEI Quality Assurance Plan that was presented to FHWA in June 2009**.

### 4.5.3 Operations and Maintenance

As part of their O&M Plan, the Concessionaire will develop a comprehensive O&M Quality Management System (QMS) which shall fully comply with the requirements of the Contract Documents, with the primary function of establishing the Concessionaire's self-monitoring process and to monitor the performance of the Concessionaire's O&M work. The O&M-QMS will provide the means for FDOT to evaluate the Concessionaire's level of performance with respect to the minimum performance requirements as detailed in Tables 4.1 and 4.2 of Vol II Div II Sect 4 of the Contract Documents for FDOT's determination of any Noncompliance Points that need to be assessed on the Concessionaire.

The Concessionaire will also develop a detailed quality assurance system for validating the information, accuracy, and results of the O&M-QMS. The system will include procedures to validate the data, times, dates, other information and calculations that are the basis of the Availability Payment, Construction Violations, Construction Availability Faults, O&M Violations, Availability Faults, Closures, Construction Closures and Noncompliance Points. The

Concessionaire will prepare O&M-QMS reports that identify the results of the O&M Quality Management System.

## 4.6 PHASE SUBMITTAL REVIEWS

As referenced in Section 3.5, the Concessionaire plans and supporting documentation for each component submittal per project zone will be reviewed by the CMT at a minimum of two phases during the design process; the 90% and Final component plans submittal phases. The Concessionaire's Corridor Master Plan (CMP), management plans, reports, etc. will also be reviewed by the CMT in accordance with the submittal time frames stipulated in the Technical Requirements and Concession Agreement of the Contract Documents. The CMP, 90% and Final component plans submittals (and subsequent reviews) represent the culmination of CMT and Concessionaire interaction through workshops and reviews, community input, public involvement, and compliance with the Technical Requirements of the Contract Documents.

Requirements for the various documents and phase submittals are provided in Vol II Div II Sect 2.I of the Contract Documents. Due to the accelerated nature of the Project, the CMT has a maximum of 28 calendar days to review each Concessionaire submittal (14 calendar days for resubmittals), unless stipulated otherwise in the Technical Requirements. However, the CMT will make every effort to expedite reviews whenever possible.

### 4.6.1 Design Review Process

FDOT D4, FTE and CDC functional area offices (collectively the FDOT Design Review Team) will review submittals in accordance with the processes and procedures established in the I-595 Design Review Handbook **(hyperlink provided in Exhibit B)**, developed specifically for this Project. The primary objective of the FDOT Design Review Team is to ensure the Concessionaire's design submittals are in compliance with the Technical Requirements of the Contract Documents. While FDOT's review is not intended to be a comprehensive and detailed review, the review team will include any comments regarding potential conflicts with the Concessionaire's ongoing design and construction activities, inconsistencies with the corridor-wide design continuity, and conflicts affecting interface with adjacent design/construction zones. Constructability reviews will be conducted to focus on the feasibility of unique design concepts based on site conditions and equipment/material requirements, accessibility of staging areas, functionality of the traffic control plan, project commitments and environmental protection safeguards, public access requirements, and specialty construction.

The review team will accommodate requests to accelerate the reviews whenever possible, and will use all strategies at its disposal to ensure proper communication between all disciplines to allow for consistent and timely review of each submittal. As illustrated by the review staff organization charts in the Design Review Handbook, construction, maintenance and operations staff will be involved in the review process at every phase to ensure constructability, maintenance, and traffic operations concerns are addressed as early as possible in the design process.

A secured access website (the design management team site – http://pm.i-595.com) has been created for the main function of providing the FDOT Design Review Team access to all information necessary to expedite the design review process, including: design submittals, review comment and response forms and associated documentation, correspondence (both internal and with the Concessionaire), reference documents (including the Contract Documents), design tracking logs, project schedules, and the calendar of design related meetings, upcoming submittals, and review deadlines.

In addition to the external reviews to be conducted by the CMT, the Concessionaire has developed an internal coordination and review process involving the interaction of design, construction and operations and maintenance staff prior to the submittal of each project deliverable. The various processes and procedures are defined in the Concessionaire's Project

Management Plan, Project Work Plan (Appendix 11.6 of the Concessionaire PMP), and the DQMP.

### 4.6.2 Release for Construction

Upon the submittal of final signed and sealed plans, the Concessionaire's Engineer of Record will certify that the plans are complete, all previous review comments have been properly addressed, all quality control / quantity assurance measures have been conducted, and that the project production is complete. The I-595 Project Manager will send a copy of the plans to the appropriate office for review, and the CMT and CDC Project Managers will stamp the plans "Released for Construction". Any subsequent changes to the record plans with require separate signed and sealed plans with the required revisions clearly denoted on the appropriate plan sheets, and a separate "Released for Construction" review and approval process.

## 4.7 OTHER REVIEWS

### 4.7.1 Independent Peer Reviews

In accordance with Vol II Div II Sect 2.I.1.d of the Contract Documents, prior to the 90% and Final component plans submittals, all Category 2 bridge plans shall have a peer review performed by an independent engineering firm not involved with the production of designs or plans. The independent engineering firm shall be contracted by the Concessionaire and shall be pre-qualified in accordance with Chapter 14-75 of the Florida Administrative Code. The purpose of the peer review is to ensure that the submittal is in compliance with all FDOT requirements and was prepared using sound engineering practices. The peer review engineer's comments and documentation of the resolution and incorporation of each comment shall be included with each submittal. The Concessionaire shall include with the Final component plans submittal, a cover letter signed and sealed by the peer review engineer stating that comments have been resolved and/ or listing the unresolved issues.

### 4.7.2 Sufficiency Reviews

Either prior to or as the first task of each phase submittal review, the CMT will provide comments on the adequacy of the Concessionaire submittal in accordance with established sufficiency checklists per phase, as well as project-specific submittal requirements of Vol II Div II Sect 2.I of the Contract Documents.

### 4.7.3 Interface Reviews

In order to ensure design and sequencing compatibility throughout the corridor, all plans reviews will include consideration of corridor continuity and adjacent project zone temporary and permanent construction interface requirements. Specific review checklists have been developed for the purpose of conducting interface reviews at the 90% and Final plans phases.

### 4.7.4 Agency Reviews

For all review phases, the CDC will be responsible for providing plans submittals to the project stakeholders with adjacent on-going projects and/or jurisdictional interest in the specific project zones, including the FHWA, FDOT Central Office, Florida's Turnpike Enterprise, Broward County, regulatory agencies and municipalities, as directed by the CMT.

### 4.7.5 Supplemental Agreement Reviews (Post-design)

Twice each year on a District-wide basis, the FDOT D4 Construction Review Team will evaluate the construction supplemental agreements processed over the previous six months. These reviews will concentrate on contract changes that resulted in cost overruns and construction time increases. The team will perform a detailed review of the issues, and will classify them into major

work categories. The team will use this information to produce three charts that illustrate the percentage distribution of problem types:

- Supplemental agreement distribution by codes and dollars
- Cost distribution by frequency of occurrence
- Time extensions.

The results of this analysis will enhance FDOT D4's ability to identify training and/or process improvement opportunities. The Final Plans Office will correlate the current plans review comments to the general areas associated with the supplemental agreements and will produce a "Top Ten" list of problem areas. The "Top Ten" list provides valuable insight in helping to reduce future cost overruns and time extensions on current projects. The list will be posted on the FDOT D4 intranet and will be distributed to all FDOT D4 departments and all Consultants doing work for FDOT D4.

# 5.0 PROCUREMENT AND CONTRACT MANAGEMENT

## 5.1 GENERAL AND INNOVATIVE PROCUREMENT STRATEGIES

The main objective of the contract procurement strategy for the Project was to provide for the most efficient utilization of time and available funding to maximize the project benefits to the public. An emphasis was placed on reducing project costs through maximizing bid competition, minimizing the expenditure of public funds by providing the optimal balance of risk between the FDOT and proposers, and providing a comprehensive contract advertisement package to minimize the potential for future claims.

The corridor improvements were originally proposed to be constructed in multiple, phased segments as funding became available, utilizing a conventional unit price design-bid-build delivery method with potential construction incentives/disincentives. Alternative contracting methods also to be considered for the individual project segments included: contracts with lane rental fees, contracts with A+B bidding, contracts with no excuse bonus, liquidated savings contracts, lump sum contracts, and design-build contracts.

### 5.1.1 Public-Private Partnership (P3) Evaluation

In order to address the funding shortfall of the Project and to accelerate the corridor improvements, a P3 delivery method was then considered for the Project. A comprehensive value for money (VfM) analysis was conducted to evaluate alternative financing and implementation strategies, including optimal risk allocation and payment mechanism options. **A hyperlink to the June 2009 summary of the VfM analysis is provided in Exhibit B**.

On July 25, 2007, FDOT held an industry forum to share with industry leaders the payment mechanism options and risk allocation framework, as well as to solicit feedback on the technical and financial approaches to the Project, which included one-on-one meetings with groups interested in participating on the Project. This assisted the FDOT in determining the most desirable project delivery method and payment mechanism to provide for the most competitive bidding process.

Following the forum, FDOT made a number of policy decisions regarding the Project, including the decision to advance the corridor improvements utilizing a P3 for the design, construction, finance, operation and maintenance of the project through a Maximum Availability Payment (MAP) payment mechanism. The decision to implement a P3 provided the following benefits:

- Accelerated schedule (provide improvements 15 years sooner than the phased design-bid-build strategy previously programmed)
- Improved efficiency of design and construction by combining all of the planned improvements into one project
- Transfer of substantial risk for the Project and time overruns and long-term cost of operations and maintenance to a concessionaire
- Provision of an up-front finance mechanism for the design and construction of the Project
- A competitive procurement process, rewarding innovation that provides the “best value” to the Project.

## 5.2 FEDERAL AND STATE PROCUREMENT REQUIREMENTS

All procurement procedures and documents for the project have been developed and issued in accordance with Chapter 334.30 of the Florida Statutes (“P3 Law”). The P3 Law grants FDOT the authority to solicit proposals from and enter into agreements with private entities, or consortia thereof, for the building, operation, ownership or financing of transportation facilities. The FDOT D4 Procurement Office, in collaboration with the CMT, was responsible for ensuring the

advertisement, selection, negotiation, and execution of the Concession Agreement was in accordance with the P3 Law.

In accordance with Title 23 of the Code of Federal Regulations, the FHWA will be responsible for full oversight of the procurement process, which has been facilitated by the FHWA Major Projects Engineer.

### 5.3 PROCUREMENT SCHEDULE

FDOT established a very aggressive schedule for the procurement of a concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the Project. The entire process from advertisement through contract award was accomplished in less than 13 months, which involved the continual collaboration of legal, financial and technical FHWA, FDOT and consultant staff. Effective communication between FDOT and the shortlisted concessionaire teams, including one-on-one meetings and responses to proposer questions, ensured the development of a comprehensive contract documents package as well as a competitive bidding process. The procurement process milestones are included in the following table:

| PROCUREMENT ITEM | DATE |
|---|---|
| Issued Request for Qualifications (RFQ) / Project Information Memorandum (PIM) | Oct. 1, 2007 |
| Issued RFQ Addendum #1 | Oct. 11, 2007 |
| Issued RFQ Addendum #2 | Oct. 24, 2007 |
| Statement of Qualifications (SOQ's) Received | Nov. 5, 2007 |
| Shortlist Selection (4 concessionaire teams) | Dec. 3, 2007 |
| Draft Request for Proposal (RFP) Technical Requirements Distribution (Sects. 1-3) | Dec. 11, 2007 |
| RFP ITP, Concession Agreement, Div I, Div II (Sects. 4-6) Distribution | Dec. 17, 2007 |
| Kickoff Meeting w/ Shortlisted Proposers | Dec. 20, 2007 |
| Proposers / Utility Agency Owners (UAO's) Coordination Meetings (#1 - #3) | Jan. 11, Feb. 1 & 29, 2008 |
| One-on-One Meetings w/ Shortlisted Proposers | Jan. 22-25, 2008 |
| One-on-One Meetings / Alternative Technical Concepts (ATC) Meetings | Feb. 5-8, 2008 |
| Issued 2nd Draft RFP | Feb. 20, 2008 |
| Issued 2nd Draft RFP Rev. 1 | Mar. 7, 2008 |
| One-on-One Meetings / ATC Meetings #2 | Mar. 12-14, 2008 |
| UAO Coordination Meetings #4 & #5 | Mar. 28, Apr. 25, 2008 |
| FHWA SEP-14 Approval | Apr. 17, 2008 |

| PROCUREMENT ITEM | DATE |
|---|---|
| FHWA Construction Authorization | Apr. 18, 2008 |
| Issued Final RFP | Apr. 18, 2008 |
| FHWA SEP-15 Approval | Apr. 22, 2008 |
| Meeting w/ USDOT / TIFIA | Apr. 24, 2008 |
| One-on-One Teleconferences on Interim Milestones | Apr. 28, 2008 |
| One-on-One Meetings w/ SFWMD | Apr. 30, 2008 |
| One-on-One Teleconferences on Payment Security | Jun. 5, 2008 |
| Issued RFP Addendum #1 | Jun. 13, 2008 |
| One-on-One Meetings | Jun. 23, 2008 |
| Issued RFP Addendum #2 | Jul. 3, 2008 |
| Issued RFP Addendum #3 | Jul. 23, 2008 |
| Issued RFP Addendum #4 | Aug. 8, 2008 |
| Issued RFP Addendum #5 | Aug. 15, 2008 |
| Issued RFP Addendum #6 | Aug. 27, 2008 |
| Issued RFP Addendum #7 | Sep. 4, 2008 |
| Technical and Financial Proposals Received from Shortlisted Proposers (2 teams – Express Access Team and ACS Infrastructure Development) | Sep. 5, 2008 |
| Issued Notice of Intent to Award Contract to ACS Infrastructure Development | Oct. 24, 2008 |
| Contract Execution | Mar. 3, 2009 |

## 5.4 MANAGEMENT TEAM REVIEW OF PROCUREMENT DOCUMENTS

Throughout the Request for Qualifications (RFQ) and RFP process, the CMT was actively involved in the preparation and refinement of the RFQ, Instructions to Proposers (ITP), and Technical Requirements of the RFP documents and addenda listed in Section 5.3. The development of the RFQ and RFP packages and subsequent addenda involved the collaborative and continual coordination of FDOT (Central Office, D4 and Florida's Turnpike) and consultant legal, financial and technical staff, including numerous page turn meetings for each procurement document, and incorporation of document refinements as necessary in the response to numerous iterations of shortlisted proposer questions, as well as questions from FHWA.

As part of the procurement documents review process, a scenarios matrix was developed to 'test' the adequacy of the RFP package documents. Workshops were held with design, construction and operations and maintenance staff not involved with the RFP development to derive potential contract issue scenarios. The intent of the RFP documents to address these scenarios was developed by the CMT technical staff, the interpretation of the RFP documents was prepared by the OCEI and legal advisory staff, and any necessary refinements to the RFP documents were

collaborated by the CMT. The entire process was over a month in duration, and was very beneficial in further solidifying the Contract Documents.

## 5.5 DECISION-MAKING PROCESS

The procurement process leading to the award of the P3 contract involved an elaborate decision-making process, including the decision to advertise a P3 delivery for the Project (as described above in Section 5.1.1), decisions as a result of one-on-one and alternative technical concepts (ATC's) meetings with the shortlisted proposers, and the process and organizational structure of the technical and financial staff responsible for the shortlisting and ultimately the selection of the best value proposal to design, build, finance, operate and maintain the project for 35 years.

### 5.5.1 One-on-One / Alternative Technical Concepts Meetings

As listed in the table under Section 5.3, numerous confidential one-on-one and alternative technical concept (ATC) meetings were conducted with the shortlisted proposers prior to the submission of their proposals to enable the CMT to engage in fact finding discussions with each of the proposers regarding the Project and the RFP package. The ATC process allowed proposers to incorporate innovation, flexibility, and construction time and cost savings into the design and construction of the Project. In accordance with the requirements of the Instructions to Proposers (ITP), the proposed changes had to provide a solution that was equal to or better to what was required by the RFP, as determined at the sole discretion of FDOT. At the conclusion of the meetings, the CMT made decisions to revise the draft RFP requirements (where appropriate) to make them flexible enough to permit the proposed ATC. This process provided for a better understanding of proposer ideas and concerns, a better quality RFP, and ultimately a more competitive bid process.

### 5.5.2 Shortlist / Selection Process

A comprehensive shortlist and selection process was developed for the Project, which included the structured organization of technical and financial selection committees, scoring committees, expert panels and review staff for the evaluation and scoring of the proposer Statements of Qualifications (SOQ's) and technical and financial proposals. **Refer to Exhibit B for the hyperlink to the procurement review organization charts**.

Evaluation procedures were prepared in accordance with the RFQ and ITP requirements **(refer to Exhibit B for the hyperlinks to the RFQ and ITP documents**). The technical and financial review staff and experts collaborated on the preparation of consensus comments for each SOQ/proposal for each evaluation criterion (including pass/fail criterion), and the scoring committees were briefed on the consensus comments in public meetings prior to the initiation of the scoring process. The process was completed upon the selection committee's selection of the best value proposal at the project selection committee briefing on October 24, 2008.

## 5.6 FHWA PROCEDURES FOR CONTRACT APPROVALS

The CMT has coordinated with and provided the FHWA Major Projects Engineer with all procurement documents for review, concurrence and/or acceptance, including advertisement notifications (RFQ), draft and final RFP documents and addenda, summary of technical and financial scores and decision of award, bid review and analysis documentation, and the executed Contract Documents. FHWA has issued the following approval documents during the course of the procurement process **(refer to Exhibit B for the hyperlink to the following FHWA Project approval documents**):

- February 21, 2007 – Approval of I-595 PMP
- April 17, 2008 – Special Experimental Project No. 14 (SEP-14) approval, allowing the technical concepts of an unsuccessful proposer to be included in the final negotiations with the successful proposer

- April 18, 2008 – FMIS project authorization
- April 18, 2008 – Initial Financial Plan approval
- April 22, 2008 – SEP-15 approval, allowing variations in how the TIFIA credit assistance program is administered
- October 28, 2008 – Concurrence in the award of the project contract to ACS Infrastructure Development.

## 5.7 PROTEST PROCEDURES

In accordance with the requirements of ITP Section 7, any persons whose substantial interests were affected by the requirements contained in the RFP, or were adversely affected by FDOT's decision to award the agreement had the right pursuant to Section 120.57(3)(b) of the Florida Statutes to protest. No protests were filed during the procurement process.

## 5.8 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROCUREMENTS

Contract specific Disadvantaged Business Enterprise (DBE) participation goals are not placed on Federal and state contracts; however, the FDOT has an overall 8.1% DBE race neutral goal it must achieve. The Concessionaire must make good faith efforts to meet this goal and is obligated to comply with applicable federal and State laws and regulations related to DBE's. Section 8.8 of the Concession Agreement requires the Concessionaire to comply with all applicable requirements of the DBE Program and include provisions to implement the DBE Program in every contract to which the Concessionaire is a party. In addition, the Concessionaire is required to incorporate these provisions in all contracts at lower tiers to ensure the DBE Program provisions are binding upon each Concessionaire's Contractor.

## 5.9 UTILITY AND PUBLIC AGENCY AGREEMENTS

Anticipated utility and public agency agreements for the Project are described in Section 1.3. The Concessionaire will be responsible for the coordination, negotiation, and execution of any third party and/or joint participation agreements required for the Project, unless otherwise directed by the CMT.

## 5.10 CHANGE MANAGEMENT

### 5.10.1 Objectives

Required changes in the project scope, schedule and/or cost will be authorized as amendments (supplemental agreements) to the Concessionaire contract for all Project directives not included in the existing contractual terms. Refer to Vol I Concession Agreement Article 10 and Vol II Div I General Requirements and Covenants Sections 5-12 for stipulations on Concessionaire Claims and Relief Events. The effective control of these changes will minimize impacts to the budget and schedule baselines, ensure that the changes are substantiated and costs and time allocated are proportional to the required work effort, ensure that the changes are processed in a timely fashion, and ensure that the changes are in accordance with the Project objectives.

### 5.10.2 Administration of Contract Changes

The change management administration process for the Project will be in accordance with procedures referenced in Section 10.1 and Article 11 of the Concession Agreement. The CMT's evaluation of the change proposal and/or Concessionaire claim will include:

- Identification of the full scope and magnitude of the change as soon as possible, and verification of the need for the change through evaluation of the current Contract Documents

- Consideration of viable alternatives, with the goal of minimizing the time and/or cost impact of the change
- Preparation of independent estimates (as required by policy) to verify the estimate provided by the Concessionaire and to serve as the basis for negotiations
- Confirmation of funding availability for the change
- Timely processing of the change in accordance with the procedural timetable requirements
- Detailed documentation of the change process, from initial receipt of the change request through execution of the supplemental agreement.

The I-595 Project Manager, the Construction/Operations Project Manager, and OCEI Resident Engineer will be responsible for receipt and initial review of Concessionaire change/claim requests, verifying requests are complete and in accordance with procedural requirements as stipulated in the Contract Documents - Vol II Div I and Article 10 of the Concession Agreement, determining validity of the requests, preparing independent estimates, organizing and participating in negotiation meetings, and documentation of the entire change process.

The CMT will participate in negotiations, ensure funding for the change is available, ensure that the contractual amendment documentation is complete and is reviewed by the CMT FDOT Central Office Legal and Financial staff, and ensure that the supplemental agreement is distributed to the appropriate management level for approval (refer to Section 5.10.4).

#### *5.10.2.1 Claims Review Teams*

Depending on the scope and magnitude of a change, a claims review team may be assembled to review the change request prior to negotiations. The review may involve the determination of the validity of the claim, the evaluation of alternatives to avoid or minimize the claim, and discussion and preparation of the independent estimate. The claims review team may consist of:

- I-595 Project Manager
- Construction/Operations Project Manager
- District Construction Engineer
- CMT Legal / Financial representatives
- CDC representative
- OCEI representative.

#### *5.10.2.2 Disputes Review Board (DRB)*

FDOT has incorporated a provision in the Contract Documents for a Disputes Review Board (DRB) to assist in resolving construction claim disputes. The DRB will consist of three members: one appointed by the Construction/Operations Project Manager from the FDOT's list of candidate members, one appointed by the Concessionaire, and one to be appointed by the other two members as the chairperson. The disputes resolution and elevation procedures are as defined in Section 2.8 and shall be in conformance with Article 25 of the Concession Agreement.

### 5.10.3 Baseline Change Control

Upon the approval and execution of any supplemental agreements, the Concessionaire will be responsible for coordinating and administering the required modifications with zones and ensuring that the Project cost and schedule baselines are properly updated to reflect the changed conditions.

### 5.10.4 Change Control Levels

#### *5.10.4.1 Design and Construction*

All schedule, scope and/or estimate changes requiring supplemental agreements and/or modifications to the Contract Documents will be coordinated through the following FDOT D4 staff (as appropriate) prior to execution:

- I-595 Project Manager
- Construction/Operations Project Manager
- District Construction Engineer
- District Director of Transportation Development
- District Director of Operations.

The FDOT approval process for construction supplemental agreements will be in accordance with Section 7.3.14 of the FDOT CPAM.

Contract changes will be coordinated with the EOC where deemed appropriate by the I-595 Project Manager. FHWA approval will be obtained in accordance with Section 7.3.11.2 of the FDOT CPAM.

#### *5.10.4.2 Operations and Maintenance*

In accordance with Section 6.2.2 of the Concession Agreement, FDOT will have the right to adopt at any time, and the Concessionaire acknowledges it must comply with, all changes and additions to, and replacements of, the Technical Volumes (comprised of the Technical Requirements and Additional Mandatory Standards of the Contract Documents) relating to the O&M work. FDOT and the Concessionaire anticipate that from time to time, FDOT will adopt Non-Discriminatory O&M Changes that will apply to the O&M work that may include: revisions to manuals and guidelines, adoption of new manuals and publications, changed, added or replacement standards, criteria, requirements, conditions, procedures, specifications, and other technical procedures. The Concessionaire will be responsible for keeping itself informed of any Non-Discriminatory O&M Changes to the manuals and guidelines. For any other changed, added or replacement standards, criteria, requirements, conditions, procedures, specifications and other provisions to the Technical Volumes, FDOT will provide written notice to Concessionaire, whereupon they shall constitute amendments, and become part, of the Technical Volumes. Non-Discriminatory O&M Changes that encompass matters that are addressed in the Technical Volumes shall replace and supersede inconsistent provisions of the Technical Volumes.

For extra work required by Non-Discriminatory O&M Changes, the Concessionaire will be entitled to recover only those extra work costs incurred each calendar year in performing such Non-Discriminatory O&M Changes in excess of an annual aggregate deductible of $250,000. The annual aggregate deductible reflects the parties' agreement that: (a) the Concessionaire will bear the financial risks for extra work costs incurred in a calendar year due to Non-Discriminatory O&M Changes up to the deductible and (b) FDOT will compensate the Concessionaire for extra work costs incurred in a calendar year due to Non-Discriminatory O&M Changes in excess of the deductible, provided that each Concessionaire claim complies with the requirements of Vol II Div I Sect 5-12 of the Contract Documents.

### 5.10.5 Change Process and Documentation

The CMT will maintain a very structured procedure and timeline for the request, evaluation, negotiation, processing, documentation, execution and distribution of supplemental agreements for changes in the contract scope, schedule, and/or cost in accordance with the requirements of the Contract Documents.

## 5.11 WARRANTY MANAGEMENT

In accordance with Section 4.14 of the Concession Agreement, the Concessionaire will be responsible for obtaining appropriate representations, warranties, guarantees and obligations with respect to design, materials, workmanship, equipment, tools and supplies furnished by the Concessionaire's contractors, which shall extend not only to the Concessionaire but also to Utility Owners and any third parties for whom work is being performed. All representations, warranties, guarantees and obligations of the contractors (a) shall be written so as to survive all FDOT and Utility Owner inspections, tests and approvals and (b) shall provide that upon any termination of the contract prior to the expiration of such representations, warranties, guarantees and obligations, they shall automatically be enforceable by FDOT. To the extent that any contractor warranty or guaranty would be voided by reason of the Concessionaire's negligence or failure to comply with the requirements of the Contract Documents in incorporating material or equipment into the work, the Concessionaire will be responsible for correcting any defects in the work performed by the contractor.

Contractual requirements for defined warranty periods and/or material performance continuing through the operating period of the Project have been provided through Value Added Specifications for asphalt and concrete pavement, select bridge components, performance turf, signal installation and lighting. Refer to Vol II Div II Sect 6 of the Contract Documents for further information. All inspection and remedial work required will remain the responsibility of the Concessionaire in accordance with the requirements of the Value Added Specifications. The Concessionaire will notify the CMT prior to all inspections and remedial work.

# 6.0 COST, BUDGET AND SCHEDULE

## 6.1 FINANCIAL PLAN

### 6.1.1 FHWA Requirement

In accordance with Section 1904(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Initial Financial Plans and Annual Updates are required for all projects designated as Major Projects. The Financial Plan and Annual Updates will be an integral part of the PMP in the formal documentation of the I-595 Project cost and funding requirements and subsequent financial progress of the Project.

### 6.1.2 Initial Financial Plan

The Initial Financial Plan (IFP) (**hyperlink provided in Exhibit B**) for the Project was submitted to FHWA on March 7, 2008 and was subsequently approved by FHWA on April 18, 2008. All funded and committed items to be included in the Project are within the Florida Transportation Budget and federal allocation through the final year of the contract term in FY 2043-44.

The IFP reflected the financial position of the Project, cash flows and expected conditions for the Project's life cycle at the time of the issuance of the final RFP package.

### 6.1.3 Financial Plan Updates

The update to the IFP is currently under development and will reflect the Project financial model at the time of financial close (March 3, 2009), including TIFIA funding to be utilized by the Concessionaire, and will be consistent with the findings of FHWA's cost estimate review conducted in January 2009. The Financial Plan will be updated annually each June 30. Each update will reflect changes in total and remaining Project cost and/or available funding. Information provided will include actual cost, expenditure and revenue performance in comparison to initial estimates, as well as estimates of future year's obligations and expenditures. The Annual Updates will also provide information on cost and revenue trends, current and potential funding shortfalls, and the financial adjustments necessary to assure completion of the Project.

## 6.2 COST MANAGEMENT

### 6.2.1 Cost Management Strategies

In their D/B/F/O/M role, the Concessionaire will share in the responsibility of effective risk management for the Project through the established performance based payment structure of the Concession Agreement. The Concessionaire will receive no compensation from FDOT until the facility is fully operational, which provides powerful incentives for the Concessionaire to complete the project improvements on time and within budget. Upon FDOT's final acceptance of the project construction, the Concessionaire will be eligible to receive a series of annual lump sum final acceptance payments. Performance based availability payments will be made during the 30 year operating period of the Project and will be subject to downward adjustment in accordance with well-defined quality and performance requirements stipulated in the Concession Agreement.

The Concessionaire's cost management approach is provided in Section 7 of the Concessionaire PMP.

### 6.2.2 Cost Estimating

#### *6.2.2.1 Independent Cost Estimates*

As part of the cost-risk analysis (refer to Section 6.2.5), the Concessionaire's Schedule of Values (SOV) bid was reviewed and validated by FHWA in January 2009 to establish a differentiation between base cost and the probable cost of risk and opportunity events. The findings of the FHWA cost estimate review team was that the SOV bid appeared to be reasonable. **Refer to Exhibit B for a hyperlink to FHWA's Cost Estimate Review.**

All estimate preparation and reviews will be conducted by experienced, interdisciplinary teams versed in FDOT policies and procedures for design, construction, maintenance and operations. FHWA will conduct independent validations of the cost estimate as appropriate at critical stages throughout the project duration.

### 6.2.3 Reference Databases

FDOT's cost estimating system (Trns*Port) is frequently updated to reflect recent bid prices and will be a valuable resource for querying up-to-date cost information for similar FDOT projects on a local and regional basis. Construction material price indices will also be utilized in evaluating recent industry trends.

FDOT's SiteManager program will house all pay item information for the Project construction, separated by the individual Project zones. SiteManager and the Concessionaire's cost-loaded Project schedule will be used for tracking costs during the Construction phase.

### 6.2.4 Budgets/Cost Control

#### *6.2.4.1 Baseline Budget*

The initial cost data in the IFP reflects an accounting of costs incurred at the time of the issuance of the final RFP package, and includes a realistic estimate of future costs in order to provide an accurate basis upon which to schedule and fund the Project. The baseline budget, including cash flows and expected conditions for the Project's life cycle established at the time of financial close on March 3, 2009, will be defined in the IFP update currently under development.

#### *6.2.4.2 CMT Consultants*

The I-595 Project Manager and I-595 Construction/Operations Project Manager will be responsible for budget and cost control oversight of the CDC and OCEI consultant contracts, respectively.

Concurrently with the monthly invoice, the CDC and OCEI will submit progress reports to substantiate the expenditures being invoiced that month, which will be discussed as part of the agenda for scheduled progress meetings. Upon the Project Manager's verbal approval, the CDC and OCEI will enter the invoice information into the Consultant Invoice Transmittal System (CITS) for formal approval by the Project Manager and payment by FDOT D4 Financial Services.

At the conclusion of the contract, a Certificate of Completion will be prepared for execution by both parties, stipulating final payment requirements by the appropriate party.

#### *6.2.4.3 Design and Construction Period*

As the Concessionaire will receive no payment from FDOT until the Project is substantially complete, the Concessionaire will be directly responsible for budget and cost control of the Project zones during the design and construction phases. **Refer to the Concessionaire PMP (Exhibit G) for the budget and cost control measures to be utilized.**

The Concessionaire will be required to submit a work progress schedule that reflects a beginning date, duration, and monetary value for each work activity, which will be used as the baseline for the CMT to monitor project progress.

The Concessionaire shall submit a Final Estimates package for the Construction work within ninety (90) days after Final Acceptance. The effort involved in preparing final estimate documents will be reduced in comparison to a conventional design-bid-build project. The Concessionaire shall adhere to the guidelines set forth in FDOT's Preparation and Documentation, Review and Administration Manuals to develop the Final Estimates package. Materials certification will be required with the submittal of the Final Estimates package. The following documents shall be included in the Final Estimate package:

a. As-Built Record Plans

b. Engineering reports (such as Load Rating, Foundation Construction Information, pile records, drill shafts records, etc.)

c. Shop drawings

d. All field and lab test results

e. Daily reports, unless they are entered in Site Manager

f. Warranties for equipment installed on the Project

g. Certificate of Occupancy

h. DRB invoices, DRB meeting minutes, where applicable

i. Estimates Office Record of Final Plans and Documents

j. Design mixes

k. Straight-edge reports

l. Certification of pre-stressed items

m. Final commercial inspection report

n. Sign inspection report

o. Complete disposition of defective materials

p. Field Book containing all survey data, alignment, and bench mark checks

q. Folder containing the following: Notice to Proceed Letter, Copies of letters granting extension of contract time, Begin and Final Notice, and documented adjustments to Contract time, Interim Milestone Bonuses or Final Acceptance Payments.

Upon FDOT's Final Acceptance of the Project construction (in accordance with the requirements of Section 4.10.3 of the Concession Agreement), the Concessionaire will be entitled to receive from FDOT the following payments ("Final Acceptance Payments"):

1. US$69,680,000 on the Final Acceptance Date or July 1, 2012 ("First Final Acceptance Payment"), whichever date is later;

2. US$103,631,000 on the Final Acceptance Date or July 1, 2013 ("Second Final Acceptance Payment"), whichever date is later;

3. US$71,712,000 on the Final Acceptance Date or July 1, 2014 ("Third Final Acceptance Payment"), whichever date is later;

4. US$95,434,000 on the Final Acceptance Date or July 1, 2015 ("Fourth Final Acceptance Payment"), whichever date is later;

5. US$123,173,000 on the Final Acceptance Date or July 1, 2016 ("Fifth Final Acceptance Payment"), whichever date is later;
6. US$217,622,000 on the Final Acceptance Date or July 1, 2017 ("Sixth Final Acceptance Payment"), whichever date is later; and
7. US$4,298,000 on the Final Acceptance Date or July 1, 2018 ("Seventh Final Acceptance Payment"), whichever date is later.

The Concessionaire shall submit an invoice in a format acceptable to FDOT's Comptroller for the applicable Final Acceptance Payment. Upon receipt of the invoice, FDOT shall make payment to Concessionaire in accordance with the requirements set forth in Section 215.422, Florida Statutes and Section 9-9 of Vol II Div I of the Contract Documents, which includes a statement of Concessionaire's rights as required under Section 215.422, Florida Statutes. In no event will the Concessionaire be eligible to receive any Final Acceptance Payments unless the Concessionaire achieves Final Acceptance in accordance with the Contract Documents.

The first Final Acceptance Payment will be subject to adjustment based on the Concessionaire's adherence to schedule and performance requirements as described in Appendix 3-B of the Concession Agreement. The first Final Acceptance Payment includes potential incentive bonuses for completing a series of interim milestones (related to major construction activities) within the established contractual deadlines as listed in Section 6.3.4. If the total amount of adjustments exceeds the First Final Acceptance Payment, FDOT will be entitled to deduct the excess amounts from the Availability Payments and will not deduct excess amounts from subsequent Final Acceptance Payments.

#### *6.2.4.4 Operations Period*

Upon Substantial Completion of the Project, the FDOT will begin making monthly Availability Payments to the Concessionaire that will be subject to adjustment based on the Concessionaire's adherence to quality and performance requirements stipulated in Vol II Div II Sect 4 and the Concession Agreement. If quality and performance measures as well as 'availability' of the roadways to traffic are not met, then the Availability Payments will be subject to downward adjustment in accordance with the methodology set forth in Appendix 6 of the Concession Agreement. The Availability Payments payable during any given fiscal year during the operating period shall never exceed the Maximum Availability Payment (MAP) for that year, adjusted for inflation.

Each Availability Payment constitutes a single, all-inclusive payment with no fixed component and no separation of payments for operations, capital, maintenance, Renewal Work, Handback Renewal Work or Upgrades.

#### *6.2.4.5 Supplemental Agreements*

No changes to the scope or payment for work determined to be out of scope will be made without the appropriate supplemental agreement documentation and approval from the CMT as described under Section 5.10.

#### *6.2.4.6 Reporting*

Status of the project cost components will documented as part of the Concessionaire's monthly progress report as described in Section 7.3.1.

### 6.2.5 Cost-Risk Analysis

A cost and schedule risk assessment was performed by Golder Associates Inc. and Michael Baker Jr., Inc. in January 2008 to evaluate risk and opportunity events relating to cost and schedule for the Project, with the goal of:

- Developing consensus of the Project uncertainties and cost estimates

- Identifying key Project risk factors and developing risk mitigation strategies
- Establishing better information for budgeting and scheduling
- Increasing the likelihood of delivering the Project within the established budget and schedule
- Providing a basis for better communication with political decision-makers and the public regarding realistic cost ranges for the Project.

In addition, as part of the FHWA's Cost Estimate Review for cost-risk elements conducted in January 2009, it was determined that FDOT's risk exposure on the Project is minimal, recommending a minimum program contingency of 1% to 2%. Updates and/or new cost-risk analyses may be conducted as the Project progresses.

### 6.2.6 Charts of Accounts and Allocations

Funding allocations per financial phase will be provided and updated as appropriate by the FDOT D4 Programs Office in the CMT's development of the Initial Financial Plan update and subsequent Annual Updates.

### 6.2.7 Construction Cost Targets

At the time of the completion of the Indicative Preliminary Design (IPD) concept, FDOT estimated a design and construction cost for the Project of $1.412 billion. The Concessionaire's Schedule of Values (SOV) submitted with the financial proposal reflected a design and construction cost of $1.226 billion, a net difference of 15% lower than the IPD estimate. As part of the FHWA's cost estimate review conducted in January 2009, it was determined that the Concessionaire's SOV bid appeared reasonable. The initial construction cost established in the development of the financial model provided in the IFP includes a 5% unallocated contingency allowance.

### 6.2.8 Contingency Management

Construction contingency budgets are maintained by the FDOT Central Office as a statewide managed program. Reserve funds are established based on funding availability.

In addition to the construction contingency allowance described in Section 6.2.7, the Initial Financial Plan for the Project includes a risk premium, estimated at 5% of the total construction cost. FDOT has added this premium to reflect the allowance the Concessionaire will require since it assumes the risk that the actual costs will exceed its budget. Based on the FHWA Cost Estimate Review conducted in January 2009, it was determined that FDOT's risk exposure for the Project is very small, recommending consideration of a minimum program contingency of 1% to 2%.

The Concession Agreement provides numerous safeguards to assist the CMT in the controlled management of unforeseen project costs, including the establishment of defined Relief Events under Section 10.2 of the Concession Agreement. Deductibles have also been established within the Concession Agreement for numerous unforeseen extra work cost scenarios for pre-existing contaminated materials (Section 4.11.2), pre-existing structural latent defects (Section 4.15), and non-discriminatory O&M changes (Section 6.2.2).

**Cost Methodology for Pre-existing Contaminated Materials:**

The Concessionaire shall be solely responsible for all costs, including extra work costs and delay costs, relating to Pre-existing Contaminated Materials, except that Concessionaire and FDOT shall allocate the risk of extra work costs as follows:

1. The first US$15,000,000 of extra work costs ("Pre-existing Contaminated Materials Deductible") directly attributable to discovering, encountering, managing, treating, handling, storing, remediating, removing, transporting and disposing of Pre-existing Contaminated Materials shall be borne solely by Concessionaire.

2. The next US$10,000,000 of extra work costs ("Tiered Pre-existing Contaminated Materials Deductible") directly attributable to discovering, encountering, managing, treating, handling, storing, remediating, removing, transporting and disposing of Pre-existing Contaminated Materials shall be borne 50% by Concessionaire and 50% by FDOT.
3. FDOT shall compensate the Concessionaire for 100% of the extra work costs directly attributable to discovering, encountering, managing, treating, handling, storing, remediating, removing, transporting and disposing of Pre-existing Contaminated Materials in excess of the Tiered Pre-existing Contaminated Materials Deductible.

**Cost Methodology for Structural Latent Defects:**

The Concessionaire shall be solely responsible for all costs, including extra work costs and delay costs, associated with Structural Latent Defects in pre-existing bridges, except that Concessionaire and FDOT shall allocate the risk of extra work costs as follows:

The first US$2,000,000 of Extra Work Costs ("Structural Latent Defects Deductible") directly attributable to repairing physical damage to pre-existing bridges caused by Structural Latent Defects shall be borne solely by Concessionaire. FDOT shall compensate the Concessionaire for 100% of the extra work costs directly attributable to repairing physical damage to pre-existing bridges caused by Structural Latent Defects in excess of the Structural Latent Defects Deductible.

**Cost Methodology for Non-Discriminatory O&M Changes:**

Extra work required by Non- Discriminatory O&M Changes (whether such extra work is caused by one or more Non- Discriminatory O&M Changes), Concessionaire shall be entitled to recover only those extra work costs incurred each calendar year in performing such Non-Discriminatory O&M Changes in excess of an annual aggregate deductible of US$250,000 ("Annual Non-Discriminatory O&M Change Deductible"). The Annual Non-Discriminatory O&M Change Deductible reflects the parties' agreement that: (a) the Concessionaire will bear the financial risks for extra work costs incurred in a calendar year due to Non-Discriminatory O&M Changes up to the Annual Non- Discriminatory O&M Change Deductible and (b) FDOT will compensate the Concessionaire for extra work costs incurred in a calendar year due to Non-Discriminatory O&M Changes in excess of the Annual Non-Discriminatory O&M Change Deductible, provided that each claim complies with Section 5-12 of Vol I Div I of the Contract Documents. The Annual Non-Discriminatory O&M Change Deductible shall be adjusted in accordance with Section 10.1.3 of the Concession Agreement.

**Cost Methodology for Claims:**

A Claim Deductible shall apply to all claims except for the following: 1) FDOT Change, 2) FDOT Caused Delay, 3) Non-Discriminatory O&M Change (which is subject to Annual Non-Discriminatory O&M Change Deductible 4) Pre-existing contaminated material which is subject to applicable tiered deductible, 5) Structural Latent Defects which is subject to applicable latent defect deductible, 6) Compensation due to Delay in Availability Payment attributable to an applicable Relief Event Delay, 7) FDOT Default.

The Claim deductible is: (a) the first US$50,000 of Extra Work Costs; and (b) the amount equal to the Delay Costs for the first 10 days of delay.

Any required reallocations or use of contingency budgets will be fully documented and elevated to the appropriate CMT, FDOT or FHWA management level for approval prior to implementation.

### 6.2.9 Cash Flow Management

Cash flow is managed with the regular and normal State of Florida processes for the State Transportation Trust Fund. The cash flow required to offset the payments to the Concessionaire mirrors the amounts programmed in the work program for the Project as defined in the IFP. FDOT D4 Programs staff, in collaboration with the CMT, will monitor actual expenditures versus projected cash flows and suggest any programmatic adjustments as necessary.

## 6.3 SCHEDULE MANAGEMENT

### 6.3.1 Schedule Management Plan

The Concessionaire is responsible for the development and maintenance of the Project schedule in accordance with the format, content and submittal requirements of Vol II Div II Sect 2.J and Section 8-3.2 of Vol II Div I of the Contract Documents. The CDC and OCEI are responsible for review of the project schedule in accordance with the contract requirements. Continual maintenance of the project schedule will be a critical project control element in accurately tracking, reporting and forecasting project progress.

Schedule refinements will include both corridor-wide and zone-specific considerations in the further definition of the project zone limits and sequencing. Corridor-wide considerations will include evaluating overall traffic control phasing, constructability, and the 'grouping' of zones to expedite construction. Zone-specific considerations will include early identification of critical path design and construction components, maximizing schedule 'float' in achieving milestones to allow for recovery from potential delays, and evaluating critical path elements for adjacent zones and other concurrent projects influencing the corridor to avoid contractor 'overlap'.

Meetings between the CMT and Concessionaire will be scheduled to coincide with the Concessionaire's submittal of the monthly schedule update to discuss the current schedule status, progress made since the previous schedule submission, any potential delays and required recovery plans, and objectives for the upcoming 30 calendar days as described in the Concessionaire's schedule narrative report. Additional meetings will be scheduled on an as-needed basis by the CMT.

The Concessionaire's schedule management approach is provided in Section 1.1.6 of the Concessionaire PMP.

#### *6.3.1.1 Schedule Control*

The Concession Agreement has built-in schedule control measures for ensuring Concessionaire compliance with contractual deadlines established for construction commencement, major permits, interim milestone works, substantial completion and final acceptance. Delays not caused by FDOT will result in increased debt costs to the Concessionaire and reduces the revenue stream available by reducing the number of availability payments that may be received by the Concessionaire. Bonus incentives are also provided as part of the first final acceptance payment in meeting the interim milestone works deadlines.

Design and construction progress will be tracked in relation to the schedule baseline, and schedule recovery plans (i.e. - alternate approach solutions, resource allocation adjustments, etc.) for activities varying from the baseline will be documented as part of the Concessionaire's monthly progress and schedule reports.

### 6.3.2 Schedule Submittals

As a condition to the commencement of design work (NTP 1), the FDOT previously accepted the Concessionaire's project schedule for the design work and advance construction activities. As a condition to commencement of construction work (NTP 2), the Concessionaire will submit and have approval or acceptance from FDOT of the project schedule for the construction work.

In accordance with Section 8-3.2.2 of Vol II Div I of the Contract Documents, the Concessionaire will submit a monthly update of the Project schedule (in Primavera format) to the CMT for review, including a schedule narrative report indicating:

- Number of days design and/or construction activities are ahead or behind schedule and any recovery plan necessary
- Current critical path of the design and construction work and any changes over the past 30 days

- Schedule logic or duration changes
- Any activities requiring FDOT participation and/or approval.

To allow sufficient preparation time for FDOT staff augmentation, the CMT may request additional schedule submittals from the Concessionaire to reflect incremental 'look ahead' schedules for key upcoming design, design submittal and construction activities.

### 6.3.3 Schedule Content

The Concessionaire's monthly schedule submittals shall comply with the guidelines of Section 8-3.2.3 of Vol II Div I of the Contract Documents. The schedule will include the sequence, order and interdependence of major construction milestones and activities, including ordering and procurement of major materials and equipment, long-lead time items, and key milestones identified in the Contract Documents. Each schedule activity will be cost-loaded and include a description, early days, float and all logic ties in sufficient detail for the CMT to monitor and measure the progress of each activity.

The schedule should adequately reflect the work breakdown structure of the Project and include the submittal and review process time for each component submittal as described in the Project Work Plan of the Concessionaire PMP. The schedule should allow for a 28 calendar day review time for FDOT review of each plans submittal, and a minimum of 14 days for each resubmittal.

The project schedule will fully integrate the individual project zone activities, such that any change to one activity will be reflected in interdependent activities throughout the entire project schedule. Common zone activities and phases will also be linked to allow for efficient 'roll-up' of data for streamlined corridor-wide progress reporting of key milestone activities within each project zone and phase.

Schedule assumptions are to be documented in the monthly schedule report to be provided by the Concessionaire and are to be updated as project uncertainties are further defined and the schedule development progresses.

### 6.3.4 Baseline Schedule

In order to benefit the Project in terms of prioritized traffic congestion relief, the Project's baseline schedule is based on the following identified Interim Milestone, Substantial Completion and Final Acceptance Dates, as defined in Appendix 3-A of the Concession Agreement. NTP 1, the FDOT written notice authorizing the Concessionaire to begin the design work, was issued on March 3, 2009 (Effective Date). NTP 2, the FDOT written notice authorizing the Concessionaire to begin the construction and O&M work, will be issued on July 31, 2009. **Refer to Exhibit G for the Concessionaire PMP, which includes the Project Schedule Summary in Appendix 11.11.**

| Interim Milestone Works | Interim Milestone Deadline |
|---|---|
| Sound Barriers Group A – includes ground mounted sound barriers generally parallel to Florida's Turnpike and north of I-595 and ground mounted sound barriers north of westbound SR-84 and completion of and acceptance of the Broward County Greenway ("Interim Milestone Works 1") | 940 Days from Effective Date |
| Ramp T-16 – opening of all lanes of Ramp T-16 for continuous operational service for traffic to northbound Florida's Turnpike ("Interim Milestone Works 2") | 940 Days from Effective Date |

| Interim Milestone Works | Interim Milestone Deadline |
|---|---|
| WB Braid – opening for permanent operations, including full capacity, of the westbound braid, including Ramps L-1 and L-2 and westbound SR-84 from Pine Island Road to Nob Hill Road ("Interim Milestone Works 3") | 940 Days from Effective Date |
| EB By-pass/Braid – opening for permanent operations, including full capacity, of the eastbound braid/by-pass, including Ramps K-1, K-2, M and O ("Interim Milestone Works 4") | 940 Days from Effective Date |
| Sound Barriers Group B – includes ground mounted sound barriers generally parallel to Florida's Turnpike and south of I-595 and ground mounted sound barriers south of eastbound SR-84 ("Interim Milestone Works 5") | 1395 Days from Effective Date |
| SR-84 EB – opening for permanent operations, including full capacity, of continuous SR-84 eastbound, from Sewell Lock to the eastern limits of the Project ("Interim Milestone Works 6") | 1395 Days from Effective Date |
| SR-84 WB– opening for permanent operations, including full capacity, of continuous SR-84 westbound, including complete connections to Ramp T-16, from Sewell Lock to the eastern limits of the Project ("Interim Milestone Works 7") | 1395 Days from Effective Date |
| Express Lanes (I-595) – opening for permanent operations, including full capacity, of the Express Lanes, including revenue collection, with or without access to Florida's Turnpike ("Interim Milestone Works 8") | 1850 Days from Effective Date |
| **Substantial Completion/Final Acceptance** | **Deadline** |
| Substantial Completion | 1850 Days from Effective Date |
| Final Acceptance | 1940 Days from Effective Date |

# 7.0 PROJECT REPORTING AND TRACKING

## 7.1 STRATEGY

The project reporting and tracking procedures outlined throughout Section 7.0 are the key components in ensuring that the project budget and schedule will be maintained to the maximum extent possible, the project will be completed to the highest level of quality, and that Federal and state policy and procedures will be enforced and complied with.

The reporting of these procedures will be coordinated, consolidated and documented as part of the Concessionaire's Monthly Progress Report. Monthly project activities involving scope, cost and schedule changes, quality reviews, cost and schedule progress, EEO compliance, and contract performance components will be documented by the Concessionaire for all active design and construction phases of each of the project zones as well as all monthly self reporting requirements Vol II Div II Sect 4.1.6 of the Contract Documents for the O&M work. Any cost increases, schedule changes, and deficient quality and performance issues will include proposed measures to mitigate these issues, and will be used to identify trends and forecast project performance to minimize future occurrences. Key upcoming project activities, issues and milestones will also be reported.

The Concessionaire also has reporting obligations in accordance with the requirements of the TIFIA loan agreement with USDOT, including annual financial plan updates and monthly construction progress reports.

Project tracking and reporting activities described throughout the PMP will be integrated through FDOT D4's Project Suite, the Electronic Document Management System (EDMS), Prolog/Encompass and design team site document management, Primavera Project schedule, SiteManager, Laboratory Management Information Systems (LIMS), Equal Opportunity Report (EOR) System, and the project website to allow for efficient, up to date and consistent progress reporting.

## 7.2 PROJECT SUITE

Project Suite is a composite database on the FDOT D4 Transportation Development intranet site that currently houses the following project information:

- Identification numbers, project manager, consultants, contractors
- Location
- Political districts / representatives
- Description and history
- Funding status
- Scope changes
- Schedule milestones
- Exceptions, variations, and typical section events
- Survey work orders
- Permits and milestones
- Commitments
- Status – activities (current and upcoming) and issues
- Contacts (internal and external)

- Project status reports.

Project Suite provides for controlled access and update authority to various fields by the appropriate FDOT D4 office to ensure the integrity of sensitive project data.

## 7.3 REPORTS

### 7.3.1 Monthly Progress Report

The Concessionaire will be required to develop and submit a monthly progress report in accordance with the Contract Documents, including the self reporting requirements of Vol II Div II Sect 4.1.6 of the Contract Documents for the operations and maintenance work. The monthly progress report will provide a concise, but comprehensive overview of the project status from both a corridor-wide and zone-specific perspective, and will provide the basis of information required to develop the Annual Updates to the Financial Plan. The monthly progress report will contain:

#### *7.3.1.1 Activities and Deliverables*

- Significant activities and deliverables completed during the reporting period, including meetings; public involvement activities; design, construction, operations and maintenance, and permitting deliverables submitted; QA/QC,VE, constructability, audit performance, compliance, and third-party reviews; FHWA/FDOT reviews and approvals; procurements and awards; claims requests, contract / supplemental agreement / third party agreement negotiations, and executions; and design, right of way, utility, permit and construction milestones achieved
- Significant activities and deliverables anticipated for the next two reporting periods.

#### *7.3.1.2 Action Items / Outstanding Issues*

- Identification and explanation of significant or sensitive issues requiring action and/or direction in order to resolve, including delays or potential impacts to project commitment, milestone and/or final completion dates; deviations from approved scopes and budgets; quality and safety deficiencies; and contractual non-compliance issues
- Status of issues, recommended course(s) of action to resolve and recover, responsible parties, and due dates
- Remedial action taken and cumulative impacts to baseline scope, schedule and budget.

#### *7.3.1.3 Schedule*

- Latest approved schedule baseline for major project zone design, construction, permitting, utility and right of way activities, phases and/or milestones
- Current overall project zone completion percentage versus latest approved schedule baseline completion percentage
- Completion percentages versus latest approved schedule baseline completion percentages for major project segment activities, phases and/or milestones
- Explanation for any schedule delays, and initiatives being analyzed or implemented for schedule recovery (unless previously documented under ‘Action Items / Outstanding Issues’).

#### *7.3.1.4 Cost*

- Funding status and planned funding obligations and disbursements, including federal obligations and/or TIFIA disbursements

- Latest approved budget baseline for major project zone activities and/or phases and contingencies
- Variance between current forecasted cost and latest approved budget
- Explanation for any cost deviations from the approved budget, and initiatives being analyzed or implemented for recovery from cost overruns (unless previously documented under 'Action Items / Outstanding Issues')
- Any speculative cost changes, status and estimated magnitude of the cost changes, and evaluation of the adequacy of remaining contingencies to keep the project within the latest approved budget.

### 7.3.2 Other Internal Reports

Internal reports will also include standard reports in accordance with the CDC and OCEI scopes of work, including monthly progress reports that will be used as a basis for monthly progress payments and reporting to the EOC and FHWA as required.

### 7.3.3 External Reports

Any required external project reports will be developed and updated as necessary by the CMT as directed by the EOC and/or FHWA. Various project reports and status information will be posted on the project web site for public and agency access, where appropriate.

### 7.3.4 FHWA / EOC Reports

The PMP and Financial Plan and the associated updates will be developed and submitted in accordance with FHWA requirements. The Concessionaire's monthly progress report will be submitted to the FHWA Major Projects Engineer on a monthly basis. Regular meetings will be scheduled with the EOC, anticipated to coincide with the quarterly FDOT D4 Directors' PSR meetings, to discuss the project status and address any issues requiring EOC review, direction and/or approval.

The CMT will also schedule I-595 meetings with the FHWA Area Major Projects Engineer to coincide with the Area Major Projects Engineer's regular meetings with FDOT D4 management staff. Additional meetings will be scheduled as required for major milestone events or significant and sensitive issues requiring immediate elevation to the EOC and FHWA.

# 8.0 PROJECT MANAGEMENT CONTROLS

As described in the previous sections of the PMP, the CMT and Concessionaire staff will ensure efficient and effective management of the Project quality, cost, schedule and reporting to meet the goals and objectives of the Project. The following sections include additional project control measures to be utilized by the CMT and the Concessionaire.

During the design review phase, the design team management website and Prolog/Encompass document management system will provide a robust pro-active feature rich document management solution in a collaborative project environment ensuring that the appropriate Project team members are informed in a timely manner of critical events or pending action required. Prolog/Encompass will provide a centralized Microsoft Sharepoint®-based document management service where all documents will be readily available for review and every team member that is required to take action on the uploaded document will be instantly notified by email.

During the construction and O&M phase, Prolog/Encompass will offer a complete data management solution to streamline the process of collection, verification, and entry of paper-based and electronic data by providing flexible tools to configure custom business rules and manage information. The OCEI operating procedures detail the document control, construction inspection audits, and O&M performance tracking procedures that implement the automated data management and communication capabilities of the Prolog/Encompass web based application.

## 8.1 RISK MANAGEMENT PLAN

The following key risk assessment related tasks were performed during the design development and procurement phases of the Project to identify key risk factors and a risk mitigation strategy to provide for optimal risk share allocation between FDOT and the Concessionaire:

- Preliminary geotechnical, contamination and utility subsurface investigations and right of way needs assessments to better define the project scope early in the process, to expedite right of way acquisition for the Project, and to minimize risk premiums in the bidding process.
- Detailed and quantitative Value for Money (VfM) analysis to test whether or not potentially higher financial costs and risk premiums associated with a concession could be offset partially or completely by efficiency gains from the transfer to a private concessionaire of completion risks and lifecycle cost, operating performance and maintenance risks.
- Collaborative and continual coordination of FDOT (Central Office, D4 and Florida's Turnpike) and CMT consultant legal, financial and technical staff in the development and refinement of the RFP documents, including numerous page turn meetings and 'scenarios' workshops. The RFP documents were further refined through coordination with the shortlisted proposers, including ATC and one-on-one meetings and response to shortlisted proposer questions.

As a result of this extensive upfront evaluation, the Concession Agreement and the Technical Requirements provide for the following cost-effective risk transfer elements for improved risk management:

- The long term operating and maintenance period covers two capital renewal cycles. This encourages high quality construction by the Concessionaire at the outset and assures that the Project will be carefully maintained right up to the moment the assets are "handed back" to FDOT.
- Full payment for construction of the Project is not earned until after it is operational. This creates powerful incentives to complete the system within the budget and on time or ahead of schedule:
    - Cost overruns for construction and 30+ years of operations and maintenance must be absorbed by the Concessionaire's equity contributors. The equity participants assume

this risk obligation to the lenders. This protects FDOT from excess costs for the entire concession period.

- Delays in achieving Substantial Completion of the construction not caused by FDOT results in increased debt costs to the private partner and reduce the revenue stream available to provide a return on equity by reducing the number of possible Availability Payments that may be received by the Concessionaire.
- Accelerated completion of the Project construction can result in lower costs and higher returns (through additional Availability Payments beyond those originally contemplated), providing an incentive for efficiency.
- Major risks, such as system integration, are completely assigned to the Concessionaire because no revenues flow until the acceptance criteria are fulfilled.

- Future Availability Payments are linked to service quality and project performance. To the extent there are faults and deficiencies, the payments are reduced. If the reductions are serious enough, lenders and equity investors may step in and replace the operator, acting on FDOT's behalf as well as their own. As a result of this payment mechanism, the annual outlays are treated as payments for a service rather than debt service obligations.
- The Concessionaire assumes the risk that costs exceed the estimates upon which its proposed Maximum Availability Payment is based. Moreover, FDOT is paying for a significant portion of the capital costs through the Final Acceptance Payments. FDOT can therefore budget for the project costs over the 35-year contract term with a high degree of specificity. All funded and committed items to be included in the Project are within the Florida Transportation Budget and federal allocation. The Project does not negatively impact nor does it delay any previously programmed or committed projects.

The Contract Documents also provide for the following key components that minimize FDOT's risk for the Project:

- Detailed requirements for the Concessionaire's development, implementation and maintenance of management plans for all phases of the Project, including but not limited to:
  - Project Management Plan
  - Environmental Compliance Plan
  - Design Quality Management Plan
  - Construction Quality Control Management Plan
  - Vibration Monitoring Plan
  - Comprehensive O&M Plan for both the construction and operating periods.
- Quantitative performance requirements for the Concessionaire during the Construction and O&M phases of the Project that enable the assessment of non-compliance points and downward adjustment of Final Acceptance and Availability Payments for non-compliance with contractual requirements.
- Detailed definition of events that may entitle the Concessionaire to certain compensation and performance relief, as well as provisions for claims requests, including claim deductibles for Structural Latent Defects, Pre-Existing Contaminated Materials, and Non-Discriminatory O&M Changes.
- Detailed definition of provisions and remedies for Concessionaire default, as well as provisions for termination of the contract.

The effective risk management strategy for the Project is best exemplified by the findings of the January 2009 FHWA Cost Estimate Review, where it was determined that FDOT's risk exposure on the Project is very small; recommending a minimum program contingency of 1% to 2%.

## 8.2 SCHEDULING SOFTWARE

All Project schedules will be developed and maintained using Primavera software to ensure uniformity and compatibility in tracking, assessing and reporting on project status through construction completion.

## 8.3 COST TRACKING SOFTWARE

Existing FDOT accounting systems will be utilized for the Project. SiteManager and the Concessionaire's cost-loaded project schedule will be used for tracking for the construction activities per Project zone. The CDC, OCEI and Concessionaire will also be required to maintain internal job cost accounting systems that are acceptable to FDOT D4.

## 8.4 PROJECT METRICS

A variety of metrics from the Contract Documents will be utilized by the CMT to measure Project cost and schedule, quality and performance, and to minimize the likelihood of unanticipated Project events, cost overruns and schedule delays.

Quality assurance, quality control, sufficiency and phase submittal reviews will be conducted by the CMT and FDOT D4/CDC functional area staff to ensure project quality and validate constructability of the design, and that all Project deliverables and work products are in accordance with the Technical Requirements of the Contract Documents.

Design and construction progress meetings will be held on a regular basis (monthly as a minimum) to monitor the status of the Concessionaire's progress on the Project and deliverables and to review action item activities. Detailed tracking logs will be continually updated to monitor Project activities, status of requests for information from both the CMT and Concessionaire, permits and right of way status, submittals review status and third-party coordination efforts, with a responsible party and schedule assigned for each activity.

Performance evaluations based on established compliance criteria in Appendix 5 of the Concession Agreement will be conducted by the CMT on a regular basis to identify any areas where corrective action may be required. As detailed in the Appendix 5 noncompliance tables, the Concessionaire is required to self monitor performance for the following general categories throughout the contract term:

- Compliance with State and Federal Labor Requirements
- Public Information
- Environmental Compliance
- Utility Adjustments
- Design and Construction Submittals
- Permit Requirements
- Vibration Levels
- Construction Violations and Availability Faults
- O&M Violations, Records and Reports
- Roadway Closures
- ITS Standard Operating Guidelines
- Interagency Participation

Failure to maintain minimum performance requirements for the above referenced criteria will result in the issuance of Non-Compliance points and monetary deductions for certain noncompliance as established in the Concession Agreement.

The Availability Payment mechanism in Appendix 6 of the Concession Agreement provides for the downward adjustment of the availability payments to the Concessionaire for defined O&M violations which include the unavailability of the Project roadways to traffic and the failure of the Concessionaire to self report O&M violations.

Additionally, the OCEI has adopted a business plan (**hyperlink provided in Exhibit B**) for monitoring performance during construction based on the following goals:

1. Validate the quality conformance to minimize impacts to the Project stakeholders
2. Maintain relief event extension to no more than 90 days, 0 days for deductible relief events, and cost overruns to no more than $20 million
3. Maintain construction contract time
4. Improve safety and mobility
5. Ensure Concessionaire EEO, OJT and DBE compliance
6. Ensure smooth transition from Construction to Operating phase
7. Achieve 75% customer satisfaction during construction.

## 8.5 VALUE ENGINEERING, VALUE ANALYSIS

### 8.5.1 Value Engineering (VE)

As part of the PD&E phase of the project, a series of week-long VE sessions were conducted by a comprehensive Value Engineering / Design Review (VE/DR) team consisting of staff from FDOT D4, Broward County, Florida's Turnpike Enterprise, and specialty consultants. Refer to the PD&E Value Engineering / Design Review Documentation Report for more information on the significant VE refinement recommendations for the Master Plan LPA that were incorporated into the PD&E concept alternatives.

VE philosophy and procedures were utilized in the development of the Indicative Preliminary Design (IPD) concept for the project prior to the issuance of the RFP package, which provided further refinement of the project concept approved under the PD&E phase. A significant cost reduction and aesthetic improvement involved the provision of the at-grade express lanes configuration that replaced the previously elevated concept, which was documented and approved under the Design Change Reevaluation for the project.

In accordance with FHWA's SEP-14 approval, cost saving technical concepts proposed by the unsuccessful proposers were included in the final negotiation of the Concessionaire's contract, resulting in a more desirable and cost-effective geometric configuration for the project.

### 8.5.2 Concessionaire Change Proposals

In accordance with Section 11.2 of the Concession Agreement, the Concessionaire may submit change proposal requests to the CMT for approval of modifications to the Technical Volumes of the Contract Documents, or for approval of modifications to the Concessionaire's proposal commitments that do not require modifications to the Technical Volumes. The change proposals are required to set forth the Concessionaire's detailed estimate of net cost impact (positive or negative) and the schedule impact of the requested change.

If the change proposal is accepted by FDOT, the Concessionaire will be solely responsible for payment of any increased design, construction and finance costs, additional risks, and any schedule delays or other impacts. If the change proposal results in a cost savings to the Concessionaire, FDOT will be entitled to a credit line in the amount of 50% of the savings to the

direct labor, materials and equipment costs associated with the change. However, FDOT will not be entitled to a share in any cost savings related to design and construction costs, with the exception of the full savings related to the associated financing costs.

## 8.6 SUBSURFACE INVESTIGATIONS

Preliminary geotechnical, contamination, and utility subsurface investigations were conducted by the CDC during the procurement phase of the Project to identify in situ soil properties, potential utility conflicts, and contaminated or unsuitable material, to establish the feasibility of proposed bridge and wall substructure alternatives of the IPD, and to better assess the feasibility of risk transfer to the private sector. Results of the investigations were provided to the shortlisted proposers as part of the RFP reference documents to provide a better understanding of the subsurface conditions and to provide for a more competitive bid process for the associated bid items.

### 8.6.1 Geotechnical

The CDC conducted a preliminary subsurface testing program for the Project, which was provided to the shortlisted proposers as part of the RFP Reference Documents. The CDC data included permeability tests for the exfiltration trenches as part of the IPD drainage analysis, utilized existing geotechnical information, and provided wall and bridge borings based on the IPD to determine feasible bridge foundation types.

The Concessionaire will be responsible for all geotechnical recommendations and geotechnical engineering analysis and design, and therefore, must employ the services of an experienced and qualified professional engineer registered in the State of Florida, referenced herein as the Geotechnical Engineering Consultant. All geotechnical investigations for the Project will be in accordance with Vol II Div II Sect 3.G of the Contract Documents. The Concessionaire's Geotechnical Engineering Consultant is to review the existing data and conduct supplementary subsurface investigations, as deemed required by the Concessionaire to accommodate their design. The Concessionaire's Geotechnical Engineering Consultant will provide signed and sealed geotechnical reports for all additional subsurface data collected in accordance with FDOT guidelines and the Contract Documents.

Geotechnical reports will be prepared, sealed and submitted to the I-595 Project Manager. Separate reports shall be submitted for:

- Bridges
- Retaining walls
- Bulkhead walls for the canal
- Sound barriers
- Miscellaneous structures
- Surface roadways, embankments, and utilities
- Buildings.

### 8.6.2 Contamination

A comprehensive Level I contamination evaluation was completed for the corridor as part of the I-595 PD&E Study. Results of the evaluation are provided in the PD&E Contamination Screening Evaluation Report (CSER). Level II assessments were also conducted during the procurement process, and the results are summarized in the Construction Advertisement Reevaluation.

Subsequent to the Construction Advertisement Reevaluation, surface water and sediment samples were also collected from the existing stormwater management ponds at Arrowhead Golf

Course. The surface water data will serve as baseline data for pre- and post-project water quality comparison. The results of this analysis will be provided in a subsequent project reevaluation.

The Level II Contamination Assessment Reports describe where additional Level II investigation may be required during the design phase. Where practical, the Concessionaire must make every effort to avoid the contaminated areas in the design of the project improvements. Where it is unavoidable, the Concessionaire will be required to perform additional Level II assessment in these areas to delineate the affected areas and prepare a plan for limited remediation of the soil and/or groundwater as needed.

The I-595 corridor passes over an area affected by a deep groundwater contamination plume from an offsite source identified by the U.S. Environmental Protection Agency (EPA) under Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, aka Superfund). The offsite source of the groundwater contamination is known as the Florida Petroleum Reprocessors (FPR) Superfund Site.

Based on coordination with the EPA, a Consent Decree, which provides provisions to design and construct all roadway improvements within the contaminated area, was drafted and lodged by the U.S. Department of Justice. The Concessionaire shall adhere to, and abide by, any and all mandated provisions and stipulations found within the Consent Decree.

The Concessionaire will be responsible for any contamination assessment necessary and any necessary remediation based upon the final project design. The Concessionaire shall provide plans to the FDOT D4 District Contamination Impact Coordinator (DCIC) for constructability review. The DCIC will review the plans and advise/recommend the course of action if/when contamination issues are apparent. The DCIC will coordinate with the Concessionaire's delegated, qualified authority concerning the removal, handling, transportation and disposal of previously identified and/or unknown undesirable, contaminated and/or hazardous material encountered during construction.

In the event that any suspected contamination is encountered during construction, or if any spill of contaminated or hazardous materials occurs, the Concessionaire must stop work immediately and notify the I-595 Project Manager who will coordinate with the DCIC. The DCIC will coordinate with the Concessionaire's delegated, qualified authority concerning the removal, handling, transportation and disposal of previously identified and/or unknown undesirable, contaminated and/or hazardous material encountered during construction.

If the Concessionaire performs any dewatering activities – especially in the vicinity of the Turnpike interchange and the FPR Superfund plume FDEP, BCEPD and SFWMD permits will be needed. These permits will likely include groundwater influence and groundwater treatment system modeling, and may require review by the EPA.

The Concessionaire will be responsible for responding to, and addressing the removal, handling, transportation and disposal of all contaminated material releases during the construction and management of the Project. This will include – but is not limited to – contaminated and hazardous materials release associated with traffic incidents, unauthorized dumping and/or similar incidents.

### 8.6.3 Utilities

Various overhead and underground utilities will be impacted by the Project improvements. The locations of existing utilities within the Project limits, to the extent such locations are currently known by the CMT and/or have been verified by field-testing, are provided on the Existing Utility Base Map. The CDC conducted test pitting at select locations to better assess the actual location of existing utilities during the procurement phase of the Project. The results of the field investigations were documented in the Subsurface Investigation. Potential utility conflict areas based on the Indicative Preliminary Design and the associated utilities were identified in the Utility Conflict Matrix. The existing Utility Base Map, Subsurface Investigation Report, and Utility

Conflict Matrix were provided to the shortlisted proposers as part of the RFP Reference Documents.

The existing utilities defined within the corridor include communication, power, water/wastewater, gas/petroleum facilities. Communication facilities are operated by AT&T Corporation, AT&T Florida, FPL Fibernet, Broward County, FDOT, Level 3, Comcast, Florida's Turnpike Enterprise, and Fiberlight. Power transmission and distribution facilities are operated by Florida Power & Light; this includes a substation adjacent to eastbound SR-84. Water/wastewater facilities are operated by the City of Sunrise, Town of Davie, and Ferncrest. Gas/petroleum facilities are operated by Florida Gas Transmission and Alligator Alley Pipeline, respectively. A water/wastewater treatment plant is located on Fort Lauderdale-Hollywood International Airport property in the southwest quadrant of the I-595/US 1 Interchange. There are three gas pipelines operated by Florida Gas Transmission gas pipeline passing through the I-595/Florida's Turnpike interchange.

The Concessionaire will be responsible for the coordination, scheduling, negotiations and agreements, permitting, reviews, cost, and in some cases the design and construction activities associated with any required utility adjustments. The utilities that are in conflict with the proposed construction shall be redesigned, permitted and relocated at the Concessionaire's expense. The Concessionaire will be responsible for providing full corridor utility management and coordination for the Project. Potential utility impacts will be evaluated and coordinated with the UAO's to establish preliminary utility exceptions and conceptual relocation and subordination agreements (including compensable costs), as required. Further definition and refinement of the utility impacts, costs, relocation requirements, exceptions and agreements will be developed and finalized by the Concessionaire, with the oversight of the CMT during the Design phase of the Project.

## 8.7 TIFIA LOAN PROGRAM

At financial close on March 3, 2009, the Concessionaire executed a TIFIA (Transportation Infrastructure Finance and Innovation Act) loan agreement with the United States Department of Transportation, acting by and through the FHWA. The TIFIA loan agreement establishes the reporting obligations assumed by the Concessionaire to the TIFIA lender that support the management of the TIFIA loan program. These reporting obligations will be provided in the Initial Financial Plan update.

## 8.8 PARTNERING

The objective of Partnering is to establish a partnership charter and action plan for the Concessionaire, the FDOT and other parties impacted by the activities covered under the Contract Documents to identify and achieve reciprocal goals. These objectives are met through participation in a major initial workshop held on May 27, 2009, as well as follow-up workshops which will be held periodically throughout the duration of the Construction Period. The Concessionaire will be responsible for the partnering location and retaining the services of the partnering facilitator. Refer to Vol II Div II Sect 2.S for additional information on Partnering requirements for the Project.

## 8.9 INSURANCE AND PAYMENT AND PERFORMANCE SECURITY

The Concessionaire will be required to meet minimum insurance and bonding requirements in accordance with the Concession Agreement Article 17 and Appendix 8.

# 9.0 ENVIRONMENTAL MONITORING

## 9.1 ENVIRONMENTAL COMMITMENTS

The PD&E Type 2 Categorical Exclusion document and subsequent reevaluations prepared for the I-595 corridor improvements summarize the process and findings of the environmental impacts evaluation associated with social, cultural, natural environment and physical components, and documents the Project commitments established as a result of the evaluation. These commitments (referenced in Section 1.1.4 of the PMP and summarized in the Concessionaire's Environmental Compliance Plan) include the environmental commitments to be implemented by the Concessionaire and monitored by the CDC, OCEI, and the FDOT D4 Environmental Management Office (EMO). These commitments will be reviewed as part of the re-evaluation and permitting processes and will be incorporated during the appropriate phase(s) of the Project.

## 9.2 PERMITTING REQUIREMENTS

The proposed Project improvements require several different types of permits from the jurisdictional regulatory agencies, including the Broward County Environmental Protection Department (BCEPD), Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), United States Army Corps of Engineers (USACOE), and United States Coast Guard (USCG). The permits for the proposed improvements include the following:

- BCEPD Surface Water Management License
- FDEP NPDES (Stormwater Pollution Prevention Plan)
- SFWMD Environmental Resource Permit
- SFWMD Right of Way Occupancy Permit
- SFWMD Water Use Permit
- USACOE Dredge and Fill Permit
- USCG Bridge Permit

In addition to obtaining the permits from the regulatory agencies listed above, the proposed Project improvements require coordination and/or permits with several local drainage districts. The local drainage districts along the Project corridor include:

- Central Broward Water Control District (CBWCD)
- Old Plantation Water Control District (OPWCD)
- Plantation Acres Improvement District (PAID)
- Tindall Hammock Irrigation & Soil Conservation District (THISCD).

During the development of the IPD, the CDC has obtained several conceptual, master plan, and construction permits as indicated in Section 3.4.1.

## 9.3 ENVIRONMENTAL MONITORING PLAN

The Concessionaire will be responsible for the overall management of environmental compliance for the Project including full corridor permit management and coordination in accordance with their Environmental Compliance Plan. The CDC and OCEI will be responsible for monitoring the Concessionaire's compliance with environmental commitments during the design and construction of the Project. The design management team site and Prolog/Encompass document management system will be utilized for records management to enable efficient updating and

retrieval of environmental documentation, commitments, permits, and tracking and reporting mechanisms. All monitoring status and activities will be summarized in the Concessionaire's monthly progress report.

### 9.3.1 Design

The CDC was responsible for the initial permit research with the appropriate regulatory agencies. Early and continual communication with the regulatory agencies significantly expedited the resolution of permitting issues and the approvals of the required permits. The CDC prepared permit applications and received permit approvals for the SFWMD Conceptual Individual ERP, SFWMD Right of Way Occupancy Permit, United States Army Corps of Engineers Dredge and Fill Permit, United States Coast Guard Bridge Permit, as well as various conceptual or master plan permits from local drainage districts, including Broward County Environmental Protection Department (BCEPD), Central Broward Water Control District (CBWCD), and Tindall Hammock Irrigation and Soil Conservation District (THISCD). These permits are being used as the basis for the Concessionaire during the design phase, and any required modification to the permits will be the responsibility of the Concessionaire.

Although the CDC completed the Design Change Reevaluation and Construction Advertisement reevaluation, the Concessionaire is now responsible for incorporating the Project commitments into all subsequent permit applications and construction plans and documents through scheduled application, report, and phase submittal reviews. Monitoring of the permitting processes and environmental commitments compliance during design will be performed by the CDC and CCEI. The Environmental Compliance Plan provides the complete listing of environmental commitments associated with the individual regulatory agencies.

### 9.3.2 Construction and Operations

The Concessionaire will be responsible for enforcement of good environmental practices during construction, for assuring that all provisions of the contract related to environmental protection are followed, and all permit conditions are met. All environmental monitoring activities will be in accordance with Section 8.2 of the FDOT CPAM – Environmental Commitment Compliance, Vol II Div II and Sect 3.F and Vol II Div II Sect 4 of the Contract Documents. As additional levels of environmental oversight, the OCEI and FDOT D4 Construction Environmental Coordinator (DCEC) will monitor permit conditions and environmental commitment compliance during construction.

As part of the environmental monitoring activities, the Concessionaire will:

- Notify the regulatory agencies and the DCEC of the permitted activity start and completion dates, and any required modification to permit procedures and/or schedule
- Prior to initiation of earth moving activities, provide a certification statement for compliance with all provisions of the approved Stormwater Pollution Prevention Plan (SWPPP) for the Project
- Inspect, document deficiencies, and ensure corrective action of any violations to the erosion control plan and the Project SWPPP
- Ensure compliance with the following provisions of the FDOT Specifications:
    - Section 110-6 – Removal of Existing Structures
    - Section 110-6.5 – Asbestos Containing Materials Not Identified Prior to the Work
    - Section 560-16 Lead Abatement
    - Section 110-9.5 – Hazardous Materials / Waste
    - Section 7-1.6 – Discovery of an Unmarked Human Burial

  - Section 7-1.4 – Compliance with the Federal Endangered Species Act
  - Section 7-1.8 – Compliance with Section 4(f) of the USDOT Act
  - Section 7-2.2 – Work or Structures in Navigable Waters of the U.S., Waters of the U.S., and Waters of the State
- Monitor all permit expiration dates and for extensions as necessary
- Survey the structure and treatment area elevations of stormwater treatment facilities and verify that the information is included in the Project as-built plans
- Notify the Construction/Operations Project Manager and OCEI and enforce violation procedures for environmental non-compliance conditions that are not immediately resolved by the Concessionaire.

The appropriate regulatory agencies, in coordination with the CMT and Concessionaire, will be responsible for monitoring all-post construction environmental performance associated with wetland mitigation sites and vegetation, endangered species, essential fish habitat, etc.

# 10.0 SAFETY AND SECURITY

## 10.1 DESIGN

The standards, codes, criteria and specifications to be utilized for the Project as stipulated in Vol II Div II Sect 2.A of the Contract Documents have been developed with safety considerations as an utmost priority. The work products to be provided by the Concessionaire during the Design phase will be reviewed by the CMT and the FDOT D4/CDC functional area offices to insure that the project elements can be constructed and operated in a safe manner. Construction, maintenance, and operations staff will be involved in the review process during every project phase to ensure safety considerations relating to constructability, maintenance, and traffic operations are addressed as early as possible in the design process.

Of utmost importance is the proper design of the geometry, signing, traffic control devices and Intelligent Transportation Systems (ITS) components to ensure the safe operation of the express lanes system. The ITS components required for the safe operation of the express lanes are comprised of integrated subsystems as further described under Section 16.2. Emergency response provisions for the express lanes will include emergency access gates and a fire suppression system. Five (5) emergency access gates (two in the eastbound direction; three in the westbound direction) will provide emergency responders with strategic accessibility to the express lanes from the I-595 general purpose lanes. The fire suppression system will provide an emergency water supply to the express lanes via a piping system and fire department connections adjacent to fire hydrants located along the south side of eastbound SR-84.

## 10.2 CONSTRUCTION AND OPERATIONS & MAINTENANCE

### 10.2.1 Construction Work

During construction, the Concessionaire's contractors will be required to provide a safe and secure environment for the traveling public and all project personnel in accordance with the regulations promulgated by the U.S. Dept. of Labor, Occupational Safety and Health Administration (OSHA), and all safety requirements stipulated in Vol II Div I of the Contract Documents. This will include properly designed and implemented maintenance of traffic plans, safe and secure work zones, and adequate areas for field offices, stockpiling materials and storing equipment. The Concessionaire's Health and Safety Officers will be responsible for the implementation of the Concessionaire's Site Specific Health and Safety Program that will include the following components as further described in Section 8.5 of the Concessionaire PMP:

- Job specific task analysis and controls
- Safety surveys
- Training of the project management team and workers
- Subconsultant health and safety programs
- Accident investigation
- Exposure assessment
- Public safety plan.

The Concessionaire CEI, in collaboration with the Health and Safety Officers, will be responsible for monitoring compliance with the Health and Safety Program and for reporting any concerns and/or violations to the OCEI.

### 10.2.2 Operations & Maintenance Work

#### *10.2.2.1 Safety and Emergency Management Plans*

In accordance with Vol II Div II Sect 4.1.9 of the Contract Documents, the Concessionaire is required to develop and implement a Safety Plan for the O&M work with the impetus to maximize the safety of the public and the Concessionaire's employees. The Concessionaire's Safety Plan provided in Volume II Section 6.0 of the O&M Manuals includes staff training, safety procedures and protocols to address the hazardous conditions associated with the O&M work during both the Construction and Operating Periods.

In accordance with Vol II Div II Sect 3.8 of the Contract Documents, the Concessionaire is required to prepare and implement an Emergency Response Plan to address both governor declared emergencies and other emergencies in compliance with the State of Florida Emergency Response Procedures. For governor declared emergencies, the Concessionaire is required to perform pre-event preparation and provide initial response post-event to protect the traveling public from grievous hazards created by the event. For other emergencies, the Concessionaire is required to perform all aspects of responding to the incident/event, including pre-event preparation, post-event initial response, and post-event cleanup and repair. The Concessionaire's Emergency Management Plan provided in Volume I Section 4 of the O&M Manuals focuses on the requirements for providing specific levels of emergency response throughout the I-595 corridor that are the responsibility of the Concessionaire, and the interface required with various governmental agencies and organizations that are responsible for emergency response on a broader scope and at higher levels.

For all emergency management activities, FDOT reserves the right to take control of the incident and/or perform recovery work with its own or other contracted forces when FDOT determines it is in its best interest to do so. Homeland Security personnel may be consulted for any threat and/or vulnerability assessments that may be performed for the project infrastructure, and in particular, the express lanes system. The assessment will consider first responder requirements for natural and man-made disasters, and response for system failures due to emergency situations.

#### *10.2.2.2 Incident Response*

In response to incidents, the Concessionaire is required to comply with the State of Florida "Open Roads Policy" to provide traffic control within 30 minutes after arrival to the scene, expedite the removal of vehicles, cargo, and debris from roadways on the State Highway System to restore, in an urgent manner, the safe and orderly flow of traffic following a motor vehicle crash or incident within the I-595 corridor.

Starting at NTP 2, the Concessionaire will monitor the corridor 24 hours a day, 7 days a week for the next 35 years. The traffic cameras throughout the corridor will be monitored from the FDOT D4 Traffic Management Center (TMC), which provide complete corridor surveillance of all operations. To enhance safe and efficient traffic operations, the Concessionaire will provide Road Ranger service, Rapid Incident Scene Clearance (RISC), and a Severe Incident Response Vehicle (SIRV) team. The I-595 Road Ranger service main function will be to assist motorists within the corridor. The Road Rangers will also clear disabled vehicles from the travel lanes, remove debris, and assist the Florida Highway Patrol and other responders during traffic incidents. The RISC service focuses on the clearance of larger and more critical incidents that affect traffic flow. The SIRV team will handle incidents that are too large or severe for the RISC team.

The Concessionaire will be responsible for meeting the performance requirements established for incident response and related tasks as described in Tables 4.1 – 4.3 of Vol II Div II Sect 4 of the Contract Documents.

# 11.0 TRAFFIC MANAGEMENT

## 11.1 DESIGN

As part of the Corridor Master Plan development, the Concessionaire will be responsible for preparing a Master Traffic Control Plan (TCP) to reflect the overall construction phasing of the corridor, as well as the phasing for the interface of the individual Project zones. The Master TCP will serve as an additional validation of the operability and constructability of the proposed phasing concept. Refined Project and individual zone limits will be established based on detailed traffic control and construction analysis to minimize phasing conflicts between project zones.

The Concessionaire will utilize the Master TCP to develop the TCP notes, sheets, cross-sections, and details for the individual Project zones in accordance with the analysis, plans requirements and traffic control restrictions of Vol II Div II Sect 3.L.6 of the Contract Documents. Measures to be considered for the TCP design include:

- Maintaining the existing number of lanes in each direction during the peak traffic hours for the duration of the Project construction
- Maintaining at least one access to all adjacent properties and businesses
- Maximizing construction operations during off-peak hours
- Minimizing the need for detours, temporary bridges, and lane closures
- Phasing requirements and construction activities of adjacent I-595 Project zones and on-going projects by others within the corridor limits
- Permanent and temporary drainage requirements of adjacent Project zones to maintain positive drainage at all times
- Coordinating with agencies having jurisdiction regarding the crossing, closing and/or relocation of expressway ramps and cross-roads and establishing the necessary agreements for the required closings or relocations
- Proper and efficient sequencing to minimize continual or repeated impacts to existing roadways and adjacent businesses
- Permanent and temporary advanced guide sign requirements to ensure proper signage through adjacent Project zones during all phases of construction
- Maintaining existing Intelligent Transportation System (ITS) and lighting operations
- Strategic placement of detour, warning, and dynamic message signing and markings in coordination with jurisdictional authorities as necessary.

The TCP will be reviewed at all submittal phases by the CMT design and construction staff to ensure that the plan is safe, cost-effective, constructible, in conformance with standard practices and procedures, and minimizes impacts to the traveling public and adjacent properties.

## 11.2 CONSTRUCTION

The Concessionaire will be required to construct the Project and maintain traffic and access in accordance with the approved TCP, FDOT CPAM, Section 9.1 – Maintenance of Traffic, and the FDOT Specifications, Division I, Section 8 – Prosecution and Progress, and Section 102 – Maintenance of Traffic.

The Concessionaire's TCP implementation is also subject to the requirements and restrictions of Vol II Div II Sect 3.L.6 and Sect R. Any violation of the lane availability requirements of the contract during construction will be subject to the downward adjustment of the first Final Acceptance Payment in accordance with Appendix 3-B of the Concession Agreement.

The Concessionaire will be required to provide a qualified Worksite Traffic Supervisor (WTS) as part of their Construction Quality Control Plan. The Concessionaire will be responsible for ensuring the WTS:

- Will be available 24 hours a day to review the project and participate in all changes to traffic control
- Will be present to direct the initial TCP setup and any changes
- Will promptly correct all safety deficiencies
- Will be available within 45 minutes after notification of an emergency situation to direct the repair of the work zone traffic control or provide alternate traffic arrangements
- Will perform a drive-thru inspection and observe traffic flow as soon as the work zone is activated and in subsequent phases of work as they are opened to traffic
- Will conduct daily inspections of all traffic control devices, traffic flow, and pedestrian, bicyclist, and business accommodations
- Will provide a signed and certified comprehensive weekly MOT Review Report to the Concessionaire's CEI to include the condition of all traffic control devices, assurance that pedestrians and bicyclists are accommodated with a safe travel path separated from mainline traffic (where appropriate), assurance that existing businesses are provided with adequate entrances during business hours, and a listing of deficiencies and proposed corrective actions.

The Concessionaire will prepare the WTS' weekly MOT Review Report by conducting field inspections of the work zone. Any MOT deficiency noted that is considered a severe hazard and life threatening will require immediate corrective action. Failure to correct the hazard immediately will serve as a basis to assess non-conformance points as outlined in Appendix 5 of the Concession Agreement.

The Concessionaire will also be responsible for providing an accepted plan for incident response (refer to Section 10.2.2.2), and will be responsible for all aspects of traffic control within the project limits related to an incident, including but not limited to the extremes of opening all lanes to traffic, or the detour of the entire I-595 mainline onto adjacent roadways. The Concessionaire will document traffic crashes that occur within the work zone, assess the relationship of the crash to the existing work zone traffic controls, and document recommended corrective measures for approval by the OCEI Resident Engineer and/or the FDOT Construction/Operations Manager.

In providing for effective traffic management, the Concessionaire will be required to:

- Coordinate with local agencies regarding any restrictions and management of special events
- Coordinate with local emergency agencies to ensure safe and adequate passage of emergency vehicles through the work zones
- Coordinate traffic maintenance with other contractors (I-595 and others) to integrate temporary signing and traffic control devices between the various construction contracts
- Coordinate with, and assist the Public Information Officer (PIO) in the disbursement of project information to the media and the public, including status of construction, traffic pattern changes, and periods of lane closures, traffic delays, alternate routes, incidents, and emergency procedures.

## 11.3 OPERATIONS & MAINTENANCE

During the Operations & Maintenance period of the Project term, the Concessionaire is responsible for managing all traffic incidents and maintaining the availability of the roadways to traffic in accordance with the FDOT Open Roads Policy (refer to Section 10.2.2.2 for further

information on the incident response measures to be provided by the Concessionaire). The Concessionaire will be required to comply with the incident response performance requirements described in Tables 4.2 and 4.3 of Vol II Div II Sect 4 of the Contract Documents, and will be subject to the downward adjustment of Availability Payments for 'unavailability events' in accordance with Appendix 6 of the Concession Agreement.

# 12.0 PROJECT COMMUNICATIONS

## 12.1 PROJECT INTERNAL COMMUNICATIONS

The extensive and continual formal and informal internal communication required between the EOC, the CMT and FDOT/consultant support staff, as well as the interface required with the Concessionaire team is defined within the various sections of this PMP. Similarly, communications within the organization of the Concessionaire team and interface with FDOT is defined within the Concessionaire's PMP.

## 12.2 EXTERNAL COMMUNICATIONS PROGRAM OVERVIEW

The CMT, in collaboration with the FDOT D4 Public Information (PI) Office and the FDOT Public Information Consultant (PIC), will build on the successes of the I-595 PD&E Public Involvement Program (PIP) to establish a comprehensive I-595 external communications program, with the key objective of maintaining the trust, support, and confidence of the Project stakeholders, the public, and the media throughout the life of the Project. The program will be structured to develop and maintain clear and continuous lines of communication with all interested and affected agencies, communities, and organizations, and to generate a broad understanding and support for the goals and objectives of the Project. An effective partnership with the various stakeholders, including the Concessionaire and the general public will be critical in developing a successful Project that is responsive to the needs of affected entities and potential users. The Public Information Team will endeavor to provide consistent messages and themes to avoid public confusion and misinterpretation. Through external feedback, the functionality and efficiency of all communication procedures will be continually reviewed and modified to better serve the intended audiences. The key strategies that will be implemented in the program will include:

- Establishing a proactive Public Information Team consisting of experienced FDOT D4 PIC and CMT staff that will be responsible for all media and public information efforts for the Project. Under the direct oversight of the FDOT D4 PI Office, the Public Information Consultant (PIC) will serve as the central point of contact for all public information activities to ensure the consistency of communications with all external parties.
- Establishing effective communication and coordination structure between the Project technical and public information staff to enable the timely distribution of accurate, current and concise Project information that is developed, presented, and/or requested.
- Collaborating with other state and local agencies with concurrent and adjacent projects to ensure that media and public inquiries and issues common to all projects are properly routed to the PIO, and that sufficient and accurate information is provided in return, and on a timely basis.
- Soliciting community input on the effectiveness of the project communications program.
- Providing current Project status information to the media and the public on a regular basis, including schedule milestone completion dates; project events; and significant project modifications.
- Continually conveying updated commuter and traffic information, including traffic pattern changes, periods of lane closures, traffic delays and incidents, and available alternate routes or detours (during construction).
- Conveying, and mitigating to the maximum extent possible, construction impacts to the local residents and businesses (during construction).
- Responding to media and public questions and requests for information on a timely basis.

- Developing and enhancing stakeholder and community ownership and pride in the Project through thorough communication of the Project goals and benefits to the local and regional community.

The external communication program will be consistent with and include all public involvement requirements as per Vol II Div II Sect 2.M of the Contract Documents.

## 12.3 PUBLIC INVOLVEMENT AND COMMUNICATIONS PLAN

### 12.3.1 Public Involvement Program (PIP)

The public involvement effort for the Project was initiated during the original I-95/I-595 Master Plan Study and continued through the completion of the I-595 PD&E Study in June 2006. An extensive Public Involvement Program (PIP), in compliance with the FDOT PD&E Manual; Section 339.155 of the Florida Statutes; Executive Orders 11990 and 11988; CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA); and 23 CFR 771, was prepared for the I-595 PD&E Study in October 2003, and all public involvement efforts during the PD&E process were documented in the PD&E Public Involvement Report.

Since the preparation of the initial PMP in December 2006, numerous public involvement activities have taken place, including the continual update of the Project website; the distribution of updated project newsletters and project information sheets; and the holding of various workshops and public informational meetings. The website, www.i-595.com, was updated on a routine basis to include Project newsletters, documents, and important announcements such as meeting dates and locations. The newsletters were distributed to residents, business owners, and other interested parties who attended the meetings or other Project events.

On June 14, 2007, a Sound Barrier Workshop was held for the residents and property owners of the Hawks Landing community. The meeting was held to seek input from adjacent property owners who would be affected should the sound barrier be constructed. Property owners were also provided with survey packages which included a description of the recommended noise barrier, a map showing the limits, and the advantages and disadvantages of sound barriers. Adjacent property owners were encouraged to fill out the survey and return it to FDOT.

An Industry Forum was held on July 25, 2007 at the Coral Springs Marriott Hotel. The forum drew interest from the engineering, construction and finance communities from around the globe. All told, the forum drew nearly 500 attendees. The goal of the forum was to share with industry leaders FDOT current plans for improvements for the I-595 corridor, as well as collect feedback on the technical and the financial approaches to deliver the Project.

Additionally, one-on-one meetings were conducted during the Industry Forum with different groups interested in participating in a P3 for the Project. Through the Industry Forum and the individual meetings, innovative ideas and comments were received on almost every aspect of the Project which helped to facilitate the decision to advertise the Project as a P3.

During January 2008, four separate Sound Barrier Workshops were held for the communities affected by the Project. As in the previous workshop with Hawks Landing, residents and property owners were invited to learn about the upcoming Project and to solicit input. The four workshops were on: January 15 for the Lake View and Isla del Sol communities, January 16 for the Manaranda Village, the Trellises, Davide Isles, Jacaranda Villas and Plantation Acres communities, January 24 for the Plantation Point and Plantation Harbor communities and January 30 for the Evergreen Place, Arrowhead and Valencia Village communities.

Follow-up meetings were held for Plantation Acres on July 15, 2008 and on March 26, 2009 and included information on the planned sound barriers as well as information on the proposed New River Greenway. Plantation Harbor had a follow-up meeting on November 13, 2008.

A Community Update Open House for the Project was held on February 12, 2008 at the Renaissance Plantation Hotel. The Community Update served as an opportunity for interested

residents to get up-to-date information about the Project. The approximate 275 attendees had access to display boards showing proposed improvements by stations of interest. There was also a comment area that provided attendees an opportunity to provide verbal comments to a court reporter or to complete a written comment form.

Following the Community Update Open House, the CMT met with over 20 elected officials to provide individual briefings on the Project and to explain its importance to the economy of South Florida and the surrounding communities. Follow-up information was provided when specific information was requested. These meetings included but were not limited to officials from the Town of Davie, City of Plantation, City of Fort Lauderdale, Florida Highway Patrol, Florida House and Senate, and the Broward County Commission.

On March 25, 2009, FDOT D4 and the Concessionaire hosted an informational meeting for prime contractors, consultants, sub-contractors, suppliers and vendors, and especially FDOT certified Disadvantaged Business Enterprises (DBE's). A Project overview was provided, and work sequencing and scheduling was discussed. The meeting emphasized FDOT's commitment to achieving a minimum of 8.1% DBE utilization annually. Representatives from Blackmon-Roberts responded to questions regarding DBE registration and participation, while the CMT and Concessionaire answered specific Project questions. Work-Force One was also present to provide information on where people can obtain information on job opportunities. Over 1100 people were in attendance.

### 12.3.2 Community Awareness Plan (CAP)

As a continuation of the successful PD&E PIP, the Public Information Team developed the initial Level 4 Community Awareness Plan (CAP) **(hyperlink provided in Exhibit B)** for the Project corridor in accordance with the format and content requirements of the FDOT D4 Community Awareness Plan Guidelines, the D4 Public Notification Process, and the D4 Local Government Input in Design Process.

The CAP is currently under revision to incorporate the latest scope, phasing and scheduling requirements for the Project. The P3 concept for the Project by its nature requires the CAP to be a dynamic "living" document. As Project designs and schedules are rolled out and refined during the various stages of the Project, the CAP will be updated to reflect any new activities not previously identified. The Concessionaire will be responsible for all updates to the CAP relating to Project issues, impacts, schedule and activities, and as a minimum, will submit the updates for concurrence by the CMT at each phase submittal.

The objective of the CAP is to identify the means of notifying local governments, affected property owners, tenants, and the public of proposed construction and the anticipated impacts of the construction. In addition to the benefits of advance notification, the process will allow time to address concerns including impacts to business and residential communities, noise abatement measures, drainage, and maintenance of traffic.

A key initial CAP activity will be a corridor community-wide kickoff meeting prior to the Concessionaire initiating major construction activities. The purpose of the meeting is to update the public on the Project schedule, construction sequencing plan, anticipated impacts to stakeholders, and the traffic control plan.

The updated CAP currently being developed will include the following:

- Detailed description of the Project (including typical sections, communities and properties affected by the Project, major issues and community concerns and how they will be addressed, special project features and amenities, and project commitments to the community)
- Detailed description of issues and impacts (including potential schedule and contract time impacts, and the maintenance of traffic plan – including lane closure restrictions, detours and maintenance of access, and description of access impacts)

- Contact information for all coordinating agencies, impacted stakeholders, elected officials, media and others identified by the PIC
- Proposed major Project phases / activities and timeline (including project schedule and timeline for completed, current and upcoming CAP activities).

As a minimum, the CAP activities for the individual project zones will include:

- Updates to city, MPO, County Commission, legislators and community groups regarding design, impact and construction status
- Informational meetings with the Concessionaire, I-595 Project Manager, the Construction/Operations Project Manager and Public Information Team members
- Mailing of Project information flyers/brochures with construction dates and specific traffic impact information
- News release of the major construction starts, including start dates, pertinent Project information and specific traffic impacts at least one (1) week prior to construction
- News release of PIO's Weekly Traffic Report
- Mass mailing of Project information flyers for total closures
- Presentations/updates to city and county officials, legislators, community groups, business groups and property owners regarding Project status (as needed or requested)
- One on one meetings to address individual concerns
- Website updates
- Video updates with MOT and construction phasing information as necessary
- Use of new media – Twitter and others as appropriate.

### 12.3.3 Metrics

Public opinion of the Project, verbal and written information provided by the Project team, and the effectiveness and expedience of response to public questions and requests for information will be surveyed and solicited through public meetings and events, as well as the Project website. Public feedback will be routinely evaluated to enhance communication and information exchange procedures.

### 12.3.4 External Communication Tools

A variety of communication tools will be used to gather and distribute information to the Project stakeholders and the public. News releases, display ads, websites, newsletters, mailings, traffic advisories, meetings, briefings, presentations, hotlines and special events will be used to solicit feedback and to keep the public informed of Project status and activities. The Concessionaire will be responsible for providing information and other pertinent activities to enable the PIC to produce updated communication tools.

#### *12.3.4.1 Media Relations and Access*

Local media groups contacted during the PD&E phase of the Project were identified and documented in the PIP Summary as part of the PD&E Public Involvement Report (PIR).

Recently FDOT D4 PIO and PIC representatives facilitated and participated in several interviews for the Concessionaire signing agreement as well as interviews regarding the economic stimulus of the Project. This included interviews with local television and stations in both English and Spanish, local and national newspapers, and industry magazines.

The Public Information Team will continue to update the media contacts listing as necessary during the life of the Project to include:

- Contact information for major print and electronic media in the area
- Listing of publications in the metropolitan area including weekly and small daily community newspapers, and newsletters for civic, government, neighborhood, and non-profit groups and organizations
- Listing of industry publications and other media tracking the unique nature of the financing as well as the operations and maintenance of the Project.

Media relations and access strategies will be developed by the Public Information Team to establish the protocol and schedule in providing information to the media, as well as receiving and responding to media inquiries. Information to be provided to the media may include Weekly Traffic Reports, traffic incidents, special events or announcements, and any required emergency procedures. Meetings will be scheduled with the Editorial Boards of the two major newspapers in the area at the start of construction. To ensure the accuracy and consistency of all information to be provided, all written correspondence with the media will be coordinated through the PIC, and reviewed by the CMT and FDOT D4 PI Office prior to release.

#### *12.3.4.2 Agency / Public Meetings*

As part of the CAP, the Public Information Team will organize, coordinate, facilitate and document various agency and public meetings and presentations throughout the duration of the Project, including:

- Community-wide construction kickoff meeting
- Informational/update meetings with the Broward County MPO, City of Plantation, City of Weston, and Town of Davie staff and elected/appointed officials, private groups, homeowner associations, and the interested public
- Standing advisory committee / team meetings.

The Concessionaire will provide all support necessary, including the preparation of materials and availability of staff, for the PIC to hold various public meetings.

#### *12.3.4.3 Standing Advisory Teams*

There are several standing advisory teams with specific functions that will also serve as information sources and outlets for the Project. It is anticipated that the following standing advisory groups will be included in the I-595 communications process:

- Broward County MPO Community Involvement Roundtable (CIR)
- Broward County Community Safety Team – meets every 2 months to discuss reduction of the number and severity of accidents in the county through education of the public, law enforcement, emergency services, and engineering
- Traffic Incident Management Team – assembly of law enforcement, fire rescue, and emergency management personnel to discuss accidents on a regional basis (hosted by FDOT)
- Corridor Advisory Team (CAT) – An I-595 advisory team may be organized to create a forum to provide updates on the Project status and schedules during the construction phase of the individual project zones. This will be further discussed by the CMT and the FDOT D4 PI Office during the development of the CAP.

Public Information Team and CMT representatives will attend and participate in advisory meetings as required.

#### *12.3.4.4 Speakers' Bureau*

Upon request, the Public Information Team will assign Project representative(s) to speak to community organizations about the Project. Presentation templates will be developed and tailored for specific audience interests and topics as necessary.

#### *12.3.4.5 Public / Agency Database*

A public involvement database was created during the I-595 PD&E Study that identifies all of the governmental and regulatory agencies, county and local municipalities, legislators and local elected/appointed officials with jurisdictional authority within the limits and proximity of the Project. This database will be regularly updated by the PIC.

A Geographic Information System (GIS) based Public Involvement Information Management System (PIIMS) was used and maintained during the PD&E process to plot the addresses of workshop and hearing attendees. These mailing lists will be updated on an as needed basis and used for targeted Project mailings. The PIC may also request that new databases be created using the FDOT D4 GIS services.

#### *12.3.4.6 Web site / E-mail / Letterhead*

The CDC will be responsible for upgrading and maintaining the current I-595 project website, www.i-595.com. Separate web pages will be maintained by the OCEI and Concessionaire which will be linked to the main website. The project website, coupled with the OCEI and Concessionaire web pages will provide up to date Project information and will enhance both internal and external communication. The following information will be provided for public access:

**Project website:**

- Home page Project updates on what is new with the Project
- General Project and contact information
- Newsletters, brochures, announcements, and calendar for current and upcoming public meetings and events
- Frequently asked questions about the project (FAQ's)
- Narrative and graphical depiction of the Project improvements
- Video clips and renderings of proposed improvements
- Historical timeline of the Project's major milestones
- Upcoming Project schedule milestones
- Archives of record documents, public meeting collaterals, media releases and miscellaneous project information.

**Construction site web pages:**

- Updates on construction work zone activities, schedules and lane and ramp closures
- Traffic advisories, safety messages and access to live traffic information for the corridor
- Media releases and Project brochures related to the construction progress
- Project performance measures for quality, cost, schedule, mobility, safety and customer satisfaction
- Narrative and photos for ongoing construction activities.

**Concessionaire web pages:**

- Information on the Concessionaire team composition and corporate structures

- Employment opportunities and on line resume uploads
- Vendor registration and procurement information
- Contacts page for customer comments and inquiries

The Public Information Team will utilize the website, e-mail and direct mail to inform the public and stakeholders about the status of Project development and upcoming public events. Templates for all Project-related logos, e-mails, letterhead, telephone correspondence, memoranda, brochures, etc. have been developed to ensure consistency and effective 'branding' of the Project correspondence.

#### *12.3.4.7 Storefronts—Open Door / Documents Review*

In addition to electronic (website) access and public meetings, the Public Information Team will establish locations for the public to view Project documents and displays. As a minimum, it is anticipated that the FDOT D4 and the I-595 project office will serve as information centers. Visitors, their questions, and any responses to questions will be logged by the Public Information Team.

#### *12.3.4.8 3-D Visual Aids*

During the development of the Indicative Preliminary Design, the CDC developed animated and narrated 3-dimensional videos of the Project for viewing by public officials and the general public via the website and at meetings and workshops. The videos provide detailed replication of the existing topography and proposed project features (e.g. - pavement, striping, signing, walls, bridges, ITS/signing, landscaping, reversible lanes, etc.), and are fully articulated with vehicular traffic simulations. The viewer is provided with a virtual tour of the corridor to better visualize the Project improvements and benefits.

The current video may be updated at various stages of the Project construction to reflect the latest Project geometric configuration as well as the phased construction of the improvements.

#### *12.3.4.9 Hotline*

A Project hotline has been established by the Public Information Team to accept calls from constituents and to provide updates, announcements, and traffic information to the public.

#### *12.3.4.10 Targeted Messages*

Public service announcements using local media outlets will be used to alert the public to safety messages, upcoming publications, the website, and other avenues to obtain information. Traveler information and advisories will also be provided to the public during construction via variable message signing in advance of construction zones.

#### *12.3.4.11 Project Newsletter / Brochures*

A Project newsletter will continue to be published, posted on the website, and mailed periodically to provide the public with updated Project information and status. Project related brochures will also be developed to explain the design and construction work, the schedule, and how to get further information on the Project.

#### *12.3.4.12 Special Events*

Special Project events will be advertised via the website, newsletters and media releases, and may include groundbreaking and ribbon cutting ceremonies, lane openings, corridor promotions, and community events that impact I-595 traffic operations.

# 13.0 CIVIL RIGHTS PROGRAM

## 13.1 OVERVIEW

As a recipient of Federal funds for the construction of highways and bridges, FDOT is required to ensure Equal Employment Opportunity (EEO) contract compliance on all Federal Aid highway construction projects. Contractors who participate on FDOT contracts are required to comply with certain EEO, Disadvantaged Business Enterprise (DBE), On the Job Training (OJT) and Wage Rate special provisions to be eligible for participation. Compliance requirements are provided in Section 1.6 of the FDOT EEO Construction Contract Compliance Work Book.

FDOT Specifications, Section 9, FHWA Form 1273, 23 CFR Part 230 and 49 CFR Part 26 gives FDOT the authority to take sanctions for the conditions and state of Contractor non-compliance. Under the FDOT's Office of Administration, the Equal Opportunity Office is responsible for the development and monitoring of policies and procedures that provide assurances to the FHWA. Under each District Construction Office, District Contract Compliance Managers (DCCM's) are responsible for the day to day administration of the contract compliance program for their respective Districts. The Concessionaire CEI will provide a Compliance Specialist to audit the requirements for the I-595 Project.

The FDOT Equal Opportunity Reporting (EOR) System provides a centralized reporting system for DBE certification, for monitoring Consultant/Contractor payments to DBE and non-DBE sub-consultants and sub-contractors, and for reporting EEO and OJT requirements.

## 13.2 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

In accordance with FDOT Policy No. 001-275-015-i – Disadvantaged Business Enterprise Utilization, it is the policy of FDOT that disadvantaged businesses, as defined by 49 Code of Federal Regulations, Part 26, shall have an opportunity to participate in the performance of FDOT contracts in a non-discriminatory environment. The FDOT DBE Program is designed to assist small business owned and controlled by socially and economically disadvantaged individuals to participate on FDOT contracts. The objectives of the program are to:

- Ensure non-discrimination in the award and administration of FDOT-assisted contracts in the FDOT's highway, transit, and airport financial assistance programs
- Create a level playing field on which DBE's can compete fairly for FDOT-assisted contracts
- Ensure that the FDOT's DBE Program is narrowly tailored in accordance with applicable law
- Ensure that only firms that meet 49 CFR Part 26 eligibility standards are permitted to participate as DBE's
- Help remove barriers to the participation of DBE's in FDOT-assisted contracts
- Assist in the development of firms so they can compete successfully in the marketplace outside the DBE program
- Provide appropriate flexibility to recipients of federal financial assistance in establishing and providing opportunities for DBE's.

The FDOT's Equal Opportunity Office administers the FDOT DBE Program in accordance with the USDOT Code of Federal Regulations (Title 49 CFR Part 26), FDOT DBE Policy, FDOT DBE Program Plan, and the FDOT EEO Construction Contract Compliance Work Book.

As part of the DBE Program, the Equal Opportunity Office also administers DBE Matchmakers Conferences at the various FDOT districts to promote DBE outreach through prime consultant/Concessionaire and DBE interaction and to discuss upcoming FDOT contracts to be advertised.

### 13.2.1 DBE Goal

Contract specific DBE participation goals are not placed on Federal and state contracts; however, the FDOT has an overall 8.1% DBE race neutral goal it must achieve. The FDOT encourages DBE's to compete for professional services and construction contracts, and encourages non-DBE Consultants and Concessionaire to utilize DBE's as sub-consultants and sub-contractors.

### 13.2.2 DBE Certification

In accordance with the requirements of contract, the Concessionaire is required to provide a DBE certification form for the Project. This form certifies that the Concessionaire will provide a good faith effort to meet FDOT's 8.1% race neutral goal, and that a DBE Affirmative Action Plan will be submitted in accordance with the requirements set forth in Section 7-24 of Vol II Div I of the Contract Documents. As part of the executed Concession Agreement (Appendix 17), the Concessionaire has provided a signed DBE Affirmative Action Plan. This Plan has been reported to the FHWA and is the primary tracking mechanism that will used to measure the progress in achieving the FDOT's annual DBE goal.

### 13.2.3 DBE Reporting

The Concessionaire will be required to report the actual payments to all sub-consultants, sub-contractors and major suppliers in FDOT's Equal Opportunity Reporting (EOR) System on a monthly basis. The Concessionaire is required to pay all sub-consultants and sub-Concessionaire within 30 days of receipt of payment from FDOT.

The OCEI Compliance Specialist will be responsible for monitoring the Concessionaire compliance and administering contract compliance reviews. Non-compliance with program requirements could result in the assessment of non-compliance points as detailed in Appendix 5 of the Concession Agreement.

## 13.3 ON THE JOB TRAINING (OJT)

As part of the Concessionaire's EEO affirmative action program, On the Job Training (OJT) will be provided to develop full journeymen / women in the types of trade or job classifications involved in the work. Contractors are encouraged to utilize the OJT Program to achieve diversity. The OJT requirements are detailed in Section 7-26 of Vol II Div I of the Contract Documents.

Prior to NTP 2, FDOT and the Concessionaire held several training evaluation meetings to finalize and agree upon the number of trainees, race and sex employment parity of contractors, proficiencies for selected training classifications and the initial schedule for on-the-job training.

The On the Job Training (OJT) for the Project was based on the actual construction costs. The actual cost was then reduced by the cost of operations not suitable for trainees. Once the final adjusted cost was reached, the standard FDOT Table 5.1.2 "Maximum Number of Trainees Required Based on Estimated Contract Amount" was used to determine the total of trainees. The final agreed upon total number of trainees for the Project is 118. The Concessionaire is required to submit Form 275-020-96 "On the Job Training Schedule" to FDOT monthly to report and track the number of trainees reported and scheduled for the upcoming period. The certified payroll of the trainees will be referenced in verifying the Monthly Time Report data. To date, FDOT has received and approved Revision 1 of the OJT Schedule, which shows a total of 4 trainees working on the Advanced Construction portion of the Project. Below is the OJT Schedule for the duration of the Project determined at the OJT meeting held in June 2009 at the FDOT D4 Office.

| OJT Scheduling Year | Number OJT Graduates | OJT Scheduling Meeting | ACTIVE CONSTRUCTION PHASES : Shaded=Active ( Schematic attached) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Advnc Const | Seg. 1 | Seg. 2 | Seg. 3 | Seg. 4 | Seg. 5 | Seg. 6 | Seg. 7 | Seg. 8A | Seg. 8B |
| 6/14/09-12/31/09 | 4 | 6/10/2009 | | | | | | | | | | |
| 1/1/10 -12/31/10 | 21 | 11/1/2009 | | | | | | | | | | |
| 1/1/11 -12/31/11 | 30 | 11/1/2010 | | | | | | | | | | |
| 1/1/12 -12/31/12 | 30 | 11/1/2011 | | | | | | | | | | |
| 1/1/13 -12/31/13 | 30 | 11/1/2012 | | | | | | | | | | |
| 1/1/14 -12/31/14 | 3 | 11/1/2013 | | | | | | | | | | |
| | 118 | | | | | | | | | | | |

As with DBE reporting, The OCEI Compliance Specialist will be responsible for monitoring the Concessionaire compliance with the OJT reporting requirements and administering contract compliance reviews. Non-compliance with program requirements could result in the assessment of Non-Compliance points as detailed in Appendix 5 of the Concession Agreement.

# 14.0 PROJECT DOCUMENTATION

## 14.1 MANAGEMENT AND APPROACH

All documentation, design files, reports, specifications, reviews, and correspondence for the Project will be prepared and filed in electronic format. The Concessionaire's CEI and the OCEI will be responsible for establishing and maintaining the filing system utilizing FDOT's Electronic Document Management System (EDMS) format. The FDOT D4 standard folder directory may be modified or supplemented as necessary for the specific filing needs of the Project. On a daily basis, the Concessionaire and the OCEI will be required to upload all official Project documents into the Hummingbird System in accordance with the filing system structure.

All files will be uploaded in .TIFF format to preserve the integrity of the data and to enable efficient search and retrieval of information. The CMT's internal filing system will follow the EDMS format to ensure compatible filing structures. The document control system implemented by the CMT, Prolog, will automatically distribute the documents into Hummingbird daily following the proper FDOT EDMS filing structure.

## 14.2 SOFTWARE

FDOT's EDMS is comprised of 9 production libraries housing digital records for FDOT's various business areas. All records are indexed to standard key attributes for easy retrieval. . The EDMS software upload from Prolog is based on a .DAT file that delineates all the parameters for the file (type, number, etc.). The .DAT files will be placed on an FTP site, along with the .TIFF files that FDOT's EDMS batch process will pick up daily.

## 14.3 CADD STANDARDS

All Project design files will be computer automated and developed and submitted utilizing Computer Aided Drafting and Design (CADD) systems and standards in accordance with Vol II Div II Sect 2 of the Contract Documents, the FDOT CADD Manual and the FDOT CADD Production Criteria Handbook.

# 15.0 RIGHT OF WAY

The FDOT D4 Right of Way (ROW) Office will be responsible for the management and oversight of all right of way activities for the Project. All maintenance of right of way documents will be in accordance with the FDOT Right of Way Manual, Section 11.3 – Right of Way Records Management.

## 15.1 ACQUISITION REQUIREMENTS

As indicated in Section 3.6, the Project improvements will require narrow areas of right of way acquisition south of eastbound SR-84 between 136th Avenue and Pine Island Road, as well as acquisition along southbound Florida's Turnpike south of I-595. The right of way requirements have been updated to reflect the needs of the latest Concessionaire design concept. These needs are in line with the Indicative Preliminary Design (IPD) right of way requirements, with only minor modifications which have included voiding a few small parcels and also introducing two new parcels. The two new parcels have been evaluated and approved by FDOT. Both parcels are very minor acquisitions and require no relocations.

In substantially reducing the right of way requirements due to drainage attenuation needs, FDOT has completed the acquisition of easement rights for the use of offsite drainage facilities at Lago Mar and Pine Island Ridge golf courses. FDOT has also acquired the Arrowhead Golf Course and is planning an expansion of its drainage system prior to surplusing the property. These golf courses are critical to the Project for drainage and will be monitored by the OCEI and the CDC for schedule and drainage compliance to ensure schedules are met and no adverse impacts occur on the Project. Acquisition is still open on Pine Island Ridge and Lago Mar golf courses until the drainage expansion of these courses has been constructed and accepted by FDOT, thus releasing any monetary hold back to the property owners.

### 15.1.1 Proactive Acquisition

As stated in Section 15.1 above, FDOT has acquired permanent drainage rights in exchange for financial compensation and renovation improvements for the following two golf courses along the corridor:

- Lago Mar Golf Course – north of I-595 east of 136th Avenue
- Pine Island Ridge Golf Course – south of I-595 east of Nob Hill

The offsite drainage agreements are mutually beneficial to all parties, and have resulted in substantial time and cost savings for the Project due to a large reduction in drainage right of way requirements.

Another golf course along the corridor, Arrowhead Golf Course, located south of I-595 east of Pine Island Road, has been purchased by FDOT. Reconstruction of the Arrowhead Golf Course to accommodate the I-595 drainage conveyance will begin in August 2009.

The proposed improvements at the Florida's Turnpike interchange will displace some residents along the southbound Florida's Turnpike mainline to accommodate the proposed Griffin Road off-ramp and the widening of Florida's Turnpike in that area. This area has since been acquired through advance acquisition and the residents have been relocated.

All proactive acquisition activities have and will be performed in accordance with the FDOT Right of Way Manual, Section 8.1 – Advance Acquisition.

### 15.1.2 Easements

Any easements required for the Project, above and beyond those associated with drainage needs described in Section 15.1.1, will be identified during the design phase of the Project. Preliminary investigation of utility easement and associated subordination agreement requirements will be

evaluated by FDOT in areas of fee takings. The Concessionaire is responsible to identify and establish license agreements or any temporary or permanent easements that may be needed as a result of construction operations. FDOT will review all new acquisitions proposed by the Concessionaire and make a final determination of need and ultimate approval. FDOT will process license agreements where necessary to handle any vertical connections needed at driveway entrances. All activities associated with the evaluation, estimation, negotiation, and preparation of legal agreements associated with easement requirements will be developed in accordance with the FDOT Utility Accommodation Manual and the FDOT Right of Way Manual.

## 15.2 COST ESTIMATES

The FDOT D4 ROW Office Cost Estimates group has prepared cost estimates for the anticipated parcels to be acquired for the Project in accordance with the FDOT Right of Way Manual, Section 6.3 – Right of Way Cost Estimating, and Guidance Document 2 – Right of Way Cost Estimates. The estimates are prepared utilizing historical and statistical information from similar projects, previous estimates, real estate market data, cost manuals, field reconnaissance, and coordination with relocation, appraisal, acquisition and legal staff, as well as planners and economists (where appropriate).

The estimates are divided into the appropriate FDOT work program right of way phases per parcel, and include costs for all elements of the required right of way coordination and acquisition process, including: land, improvements, damages, litigation awards and administrative settlements, business damage payments, owner fees (appraisal, CPA, attorney and other costs), in-house and consultant fees, appraisal and review fees, CPA fees, court reporter and witness fees, demolition contracts, outside counsel fees, title search fees, hazardous materials investigation, relocation costs, utility reimbursement costs, and inter-governmental service fees. The estimates for the P3 portion of the Project are being updated by appraisers in a more detailed format prior to acquisition of each parcel. The estimates for future I-595 projects that are not included in the P3 will be updated annually (at a minimum) by the FDOT D4 ROW Office prior to the programming of right of way funds for the upcoming fiscal year. The FDOT D4 right of way cost methodology will be periodically validated by comparison of preliminary estimates versus actual project costs.

## 15.3 ACQUISITION PROCESS

### 15.3.1 Mapping

Refer to Section 3.6 for the description of the right of way mapping process, roles and responsibilities for the Project.

### 15.3.2 Appraisals

Upon the review and acceptance of the Final Right of Way Maps for I-595 (SR-84) and the Maps for Florida's Turnpike, the FDOT D4 ROW Office will initiate the preparation of appraisals for the parcels to be acquired for the Project. All appraisal preparation and review will be in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP), and the FDOT Right of Way Manual, Sections 6.1 – Appraisal and Appraisal Review and 6.2 – Supplemental Standards of Appraisal. The appraisal reports will be developed by Fee Appraisal consultants under contract with FDOT D4. FDOT D4 ROW staff will review the appraisals and provide a Review Appraisal Statement (RAS), certifying compliance with the USPAP and conformity with state laws, rules, policies and procedures applicable to valuation under eminent domain for transportation purposes. All data books, appraisal reports, RAS's, and other reports will be entered into the FDOT D4 Right of Way Management System.

### 15.3.3 Negotiations

Prior to or concurrently with a written offer to purchase property, the FDOT D4 ROW Office will provide each property owner with a Notice to Owner which stipulates the guaranteed rights of the property owner in accordance with Section 73.015 of the Florida Statutes. A copy of the approved appraisal, as well as all right of maps, construction plans, and support documentation will be provided to the property owner within 15 days upon request.

The initial binding offer will be delivered directly to the property owner, and the FDOT D4 ROW Agents (either in-house or contracted staff) will negotiate in good faith with the property owner or his/her representative in accordance with the FDOT Right of Way Manual, Section 7.2 – The Real Property Negotiation Process. The property owner will be allotted 30 days from the receipt of the initial binding offer to respond before FDOT D4 will be permitted to file a condemnation suit, unless the 30 day period is waived by the property owner in writing.

If an agreement is reached as to the amount of compensation, a binding purchase agreement will be drafted for execution by all parties, requiring the signature of the FDOT D4 ROW Manager on behalf of the FDOT.

### 15.3.4 Suit Preparation

If an agreement is not reached after a reasonable effort to negotiate, eminent domain lawsuit information will be prepared by the FDOT D4 ROW Agents to include all information as required under the FDOT Right of Way Manual, Section 7.6.2 – Information Necessary to Prepare a Lawsuit. Prior to filing the lawsuit, the attorney assigned to the case by the FDOT D4 Legal Office is responsible for reviewing the pleadings and letters to verify the documents are acceptable, and for signing the documents prior to filing.

### 15.3.5 Closing / Certification

A closing shall not be conducted prior to final FDOT D4 acceptance. Final acceptance will be granted by the FDOT D4 ROW Manager when FDOT has obtained a binding agreement, has delivered a copy to the seller, and at least 30 days have elapsed since the date of execution of the binding agreement by all parties.

Prior to right of way closing for the Project, the FDOT D4 ROW Office will insure all real property has been acquired and all subordinate interests cleared in accordance with the FDOT Right of Way Manual, Section 11.3 – Right of Way Records Management. The right of way will be closed within 18 months of the date of closing on the last parcel on the Project, or the date of entry of the last final judgment on the Project, whichever is later. In accordance with the FDOT Right of Way Manual, Section 11.4 – Right of Way Project Closing, the FDOT D4 ROW Office will:

- Ensure all right of way documents are filed and the Right of Way Management System is updated
- Determine the financial and contractual status of the Project, and ensure that final billings have been processed
- Request the FDOT D4 Programs Office to place the Project in closed status for expenditures, but open for receipt of revenue
- Execute Form No. 575-090-10, Right of Way Project Completion – FAP Projects, certifying that all parcels have been acquired and all legal documents are on file
- Document the date the Project was closed or certified for final vouchering, in order to determine when the records retention schedule has been met.

In accordance with the FDOT Right of Way Manual, Section 12.1 – Right of Way Certification, the FDOT D4 ROW Manager shall execute Form No. 575-095-05, Right of Way Certification. Right of way certification is required prior to construction letting to certify that FDOT has title to all right

of way has been acquired, all displaced persons, businesses and personal property have been relocated, and all required demolition of structures and improvements have been completed or specified for removal by the Contractor.

## 15.4 RELOCATION ASSISTANCE PROGRAM

Right of way acquisition for the I-595 corridor will involve partial and/or complete purchase of parcels resulting in the displacement of residential and non-residential properties. Under the requirements of federal law and state statute, property owners will be paid fair market value for their property and given assistance in finding replacement business sites and dwellings.

Three potential areas of displacement result from the proposed corridor roadway improvements, and include:

1. The proposed improvements at the Florida's Turnpike interchange will displace some residences along the southbound Florida's Turnpike mainline to accommodate the proposed Griffin Road off-ramp and the widening of Florida's Turnpike in that area. This area has since been acquired through advance acquisition and the residents have been relocated.
2. A new ramp is proposed that will complete the extension of the westbound I-595 C-D system to the east by connecting to I-95. The ramp will be in the area east of Pond Apple Slough along the north side of the existing westbound I-595 mainline. Several businesses will be impacted due to the proposed improvements. This acquisition will not be required for the Project, but will be required as part of a future I-595 project.
3. A new ramp is proposed that will complete the extension of the eastbound I-595 C-D system to the east by connecting to I-95. The area along the south side of the existing I-595 EB-NB flyover will be impacted by the proposed ramp to I-95 southbound from the eastbound C-D road. Several businesses will be impacted due to the proposed improvements. This acquisition will not be required for the Project, but will be required as part of a future I-595 project.

The following table summarizes the anticipated relocations:

| **Relocations** | | | |
|---|---|---|---|
| Residential | Commercial | Signs | Personal Property |
| 27* | 48** | 6 | 3 |
| | | | |

* Florida's Turnpike Enterprise has relocated all 27 residential displacees.

** The original Conceptual Stage Relocation Plan (CSRP) noted 22 businesses for relocation; the update reflects 48 businesses. Twenty-four (24) of the additional displacees are due to the expansion of a commercial condominium along I-595. The remaining two are due to additional acquisition area needed for a sound barrier.

Note: Numbers do not include relocations necessary for any required drainage pond construction.

As noted in the table above, the overall relocations for a corridor of this size are relatively small, with only 27 residential mobile home relocations and 48 commercial relocations within a minimum number of parcels. A review of the study area has revealed that there are a sufficient number of comparable homes and commercial sites available at the present time both for sale and for rent. Additional information regarding these relocations is provided in the Conceptual State Relocation Plan (CSRP) prepared for the Project during the PD&E phase.

In order to provide the affected residents opportunities to comment on the alternatives being developed for the Project, FDOT D4 conducted public workshops and hearings during the PD&E phase. During the course of these public involvement opportunities with the affected residents,

concerns were expressed about noise impacts and relocation compensation. However, considering the magnitude of the I-595 improvements and the related improvements to Florida's Turnpike, these relocations are considered minimal and unavoidable.

In order to minimize the unavoidable effects of right of way acquisition and displacement of people, the FDOT D4 will carry out a right of way acquisition and Relocation Assistance Program in accordance with: Florida Statute 339.09; the FDOT Right of Way Manual, Section 9.1 – Relocation Assistance Program, Section 9.2 – General Relocation Requirements, and Section 9.5 – Relocation Assistance for Mobile Homes; and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

The FDOT D4 ROW Office will provide advance notification of impending right of way acquisition to the affected parcel owners. Before acquiring right of way, all properties will be appraised on the basis of comparable sales and land use values in the area. Owners of property to be acquired will be offered and paid fair market value for their property rights.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacation date, and no occupant of a residential property will be required to move until decent, safe and sanitary replacement housing is made available. "Made available" is interpreted to mean that the affected person has either by himself obtained and has the right of possession of replacement housing, or that the FDOT has offered the displacee decent, safe and sanitary housing which is within his financial means and available for immediate occupancy.

A Right of Way Relocation Specialist will contact each displacee to be relocated to determine individual needs and desires, and to provide information, answer questions, and provide assistance in finding replacement property. Relocation services and payments will be provided without regard to race, color, religion, gender, or national origin.

All tenants and owner-occupant displacees will receive an explanation regarding all options available to them, such as (1) varying methods of claiming reimbursement for moving expenses; (2) rental replacement housing, either private or publicly subsidized; (3) purchase of replacement housing; and (4) moving owner-occupied housing to another location.

Financial assistance will be made available to the eligible displacee to:

1. Reimburse the displacee for the actual reasonable costs of moving from homes, businesses, and farm operations acquired for a highway project
2. Make up the difference, if any, between the amount paid for the acquired dwelling and the cost of a comparable decent, safe and sanitary dwelling available on the private market
3. Provide reimbursement of expenses, incidental to the purchase of a replacement dwelling
4. Make payment for eligible increased interest cost resulting from having to assume another mortgage at a higher interest rate. Replacement housing payments, increased interest payments, and closing costs are limited to a $22,500 combined total.

A displaced tenant may be eligible to receive a payment, not to exceed $5,250, to rent a replacement dwelling or room, or to use as down payment, including closing costs, on the purchase of a replacement dwelling.

On or before November 1 of each year, the State Relocation Administrator will submit the FDOT statewide Uniform Relocation Assistance and Real Property Acquisition Report to the FHWA for review.

## 15.5 SCHEDULING AND REPORTING

The FDOT D4 ROW Office has prepared a Parcel and Expenditure Plan for the I-595 corridor that will be updated annually to forecast parcels to be acquired and the anticipated acquisition expenditures per parcel for the next two fiscal years. The plan is broken down into a monthly

forecast for the next fiscal year, and a quarterly forecast for the subsequent fiscal year. As a complement to the Parcel and Expenditure Plan, the FDOT D4 Legal Office has prepared a Litigation Expenditure Plan to forecast litigation costs for the parcels to be acquired. These plans will be utilized in evaluating acquisition performance and establishing and updating the annual work program right of way budget for the I-595 corridor. A Right of Way Certification and Parcel Production Report will be prepared annually to document the certified parcels, acquisition tasks completed, and the associated actual expenditures for the fiscal year.

The FDOT D4 ROW Office will also prepare a monthly Production Status Report to track the on-going status of parcel acquisition. The acquisition schedule will be updated on a monthly basis by the FDOT D4 Scheduling Office.

# 16.0 SYSTEM-WIDE ELEMENTS

## 16.1 UTILITIES

The Concessionaire will assume FDOT D4's role as the utility liaison in providing full corridor utility management and coordination. The CDC will ensure that FHWA/FDOT standards, policies, procedures, and design criteria are followed concerning utility coordination in accordance with Vol II Div II Sect 3.H of the Contract Documents. The FDOT standards, policies, procedures, and design criteria are contained in the FDOT Plans Preparation Manual, Standard Specifications for Road and Bridge Construction, Rule 14-46.001 (Utility Accommodation Manual), and any supplemental specifications, provisions, or agreements that will be derived specifically for the project zones.

Existing utilities that have been identified within the corridor project limits are described in Section 8.6.3. The Concessionaire will initiate coordination with the various utility agency owners (UAO's) (provided in the table below) during the Corridor Master Plan development, and will develop an updated contact list and composite utility drawings for the corridor. The utility coordination process, roles, and responsibilities for the CDC and the Concessionaire during the Corridor Master Plan and Final Design phases of the Project is further described in Vol II Div II Sect 3.H of the Contract Documents.

All utility work will be completed in accordance with approved or acquired FDOT permit(s), the Utility Accommodation Manual, Florida Statute 337, and 23 CFR 645. For the utility design relocation and/or construction, a legal agreement and/or a Utility Work Schedule between the Concessionaire and the UAO will be drafted detailing responsibility and pertinent areas such as construction specifics, cost, schedules, etc.

The Concessionaire, with oversight by the CMT, will be responsible for ensuring all coordination efforts are identified, documented and completed in accordance with the FDOT Utility Accommodation Manual. Coordination efforts shall include, but are not limited to, design reviews, construction oversight, initiating and drafting of all necessary legal agreements, preparation of relocation schedules, administering utility coordination meetings and validating that all necessary permits are acquired. In addition, utility cut-over time shall be coordinated in such a manner that ensures minimal or preferably no interruption of utility service.

| Utility Type / Facility Type | Owner |
|---|---|
| Telephone | AT&T Corp. |
| Telephone | AT&T Florida |
| Electric | FPL Distribution |
| Electric | FPL Transmission |
| Communications | FPL Fibernet |
| ITS Fiber Optic | Broward County Traffic Engineering (ITS) |
| ITS Fiber Optic | District 4 (ITS) |
| Fiber Optics | Level 3 |
| Cable | Comcast |
| Petroleum | Alligator Alley Pipeline |

| Utility Type / Facility Type | Owner |
|---|---|
| Gas | Florida Gas Transmission |
| Gas | TECO Peoples Gas |
| Water and Sewer | Broward County OES |
| Water and Sewer | City of Sunrise |
| Water and Sewer | Ferncrest Utilities |
| ITS Fiber Optic | Florida's Turnpike |
| Fiber Optics | Fiberlight |
| Water Management Dist | Old Plantation Water Control |
| Water and Sewer | Town of Davie |

### 16.2 INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

The Project will include local and regional traffic management technologies that will connect to and enhance the existing regional traffic management infrastructure, which will require comprehensive systems integration activities for design, installation, testing, commissioning, and operations and maintenance.

The Concessionaire will be responsible for the design, construction, integration, operation, and maintenance of the existing, new and permanent I-595 corridor Intelligent Transportation Systems (ITS) deployment to support traffic management and operations of the express lanes and the general purpose lanes. This deployment shall include a fiber optic communication network subsystem, an express lanes Access Control subsystem, an emergency access gates (EAG) subsystem, a Closed Circuit Television (CCTV) camera traffic monitoring subsystem, a Dynamic Message Sign (DMS) subsystem, a Changeable Message Sign (CMS) subsystem, a Highway Advisory Radio (HAR) subsystem, a Microwave Vehicle Detection Station (MVDS) subsystem, Electronic Toll Collection (ETC) subsystem, and a power backup subsystem, including all ancillary components within the I-595 corridor. The Concessionaire's responsibilities for each of these subsystems are defined in Attachments 1 and 2 of Vol II Div II Sect 3 and in Vol II Div II Sect 4 of the Contract Documents.

The Concessionaire will be responsible for the design, construction and integration of a CCTV camera traffic monitoring subsystem and a MVDS subsystem along Florida's Turnpike at the I-595 / Turnpike interchange from Peters Road to Griffin Road. The Concessionaire will also be responsible for the relocation of the DMS/CMS subsystem currently installed on the Turnpike between Peters Road and Griffin Road. The Concessionaire will turn these subsystems over to FTE upon the completion of construction and acceptance by FDOT.

Refer to the ITS Deployment Requirements provided as Attachment 1 to Vol II, Div II Sect 3 for a full description of the Concessionaire's responsibilities in the maintenance of the Interim ITS (ITMS) during construction, and the design, construction and integration of the new I-595 and FTE ITS systems.

## 16.3 SIGNING

The Concessionaire will be responsible for the development of a Master Signing and Pavement Marking Plan as part of the Corridor Master Plan. The Master Signing Plan will be a valuable tool in providing for corridor signing consistency and validating the Project geometry from a signing standpoint in accordance with the requirements of Vol II Div II Sect 3.S of the Contract Documents and the FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).

As part of the Master Signing Plan development, the Concessionaire will be responsible for:

- Development of the existing corridor sign inventory and providing recommendations for existing signing deficiencies
- Sign panel design and locations for the proposed corridor guide signs for the Master Signing Plan, as well as the signing and locations for the phasing of the individual Project zones
- Coordination with the CMT and Florida's Turnpike Enterprise to ensure signing consistency and accommodation of ITS dynamic message signing, lighting, service points and other appurtenances on the I-595 and Florida's Turnpike facilities.

Coordination with Broward County and local municipalities will be also required to coordinate sign placement on local / county streets and relocation requirements for existing signing. The sign panel design for the express lanes will be evaluated versus industry standards to establish the most effective delineation of the express lanes signing for optimal safety and operational benefit.

## 16.4 SOUND BARRIERS

Sound barriers at 13 locations were recommended for further consideration in the Construction Advertisement Reevaluation which was approved on April 8, 2008. The recommended locations are referred to by the 21 community name(s) that the sound barriers are intended to benefit. The following lists the locations where sound barriers are recommended for further consideration in the Final Design phase.

- Kings Manor Estates
- Plantation Acres
- Hawks Landing
- Manaranda Village, The Trellises, Davide Isles, and Jacaranda Village
- Evergreen Place
- Arrowhead Golf and Tennis Club and Valencia Village
- Lake View Estates
- Isla del Sol and Plantation Landings
- New River Cove Apartments, Hacienda Flores, and Lauderdale Isles
- Lauderdale Little Ranches
- Everglades Lakes Mobile Home Park
- Plantation Harbor
- Plantation Point and Broadview Park

These 13 sound barrier locations were previously recommended in the PD&E Study and/or the November 28, 2007 Design Change Reevaluation. As presented in the Construction Advertisement Reevaluation, sound barriers are no longer recommended for Sunshine City Mobile Home Park, Paradise Village, and The Palms Apartments. Since the Design Change

Reevaluation, conceptual designs were developed for the 13 locations where sound barriers were recommended and were included as part of the IPD.

The Concessionaire will use the IPD sound barrier concept as a starting point for the design. The Concessionaire will prepare all necessary sound barrier plans in a full-scale format with typical sections, tabulations, plan, profiles, notes and details in accordance with the requirements of Vol II Div II Sect 3.N.

Upon completion and approval of the Corridor Master Plan line and grade geometry, the CDC will identify any design changes that would require a reanalysis of the traffic noise and will coordinate accordingly with the CMT and FDOT D4 EMO. The CDC will re-analyze sound barriers as necessary for feasibility and reasonableness to re-establish barrier height and length. Prior to any sound barrier analysis or decisions, the CDC is to meet with the CMT and FDOT D4 Environmental Management Office (EMO) to coordinate the analysis efforts. The CDC will also perform a land use review to identify noise sensitive areas that may have received a building permit subsequent to the completion of the PD&E Noise Study Report, but prior to the date of public knowledge, or locations where land use has changed. Eligible noise sensitive sites that were not considered during the PD&E phase will be subject to a traffic noise evaluation, and if applicable, a sound barrier evaluation. The Concessionaire will be provided with the latest noise analysis findings for their use in the Final Design phase.

An engineering review will be performed by the Concessionaire prior to initiating the design of the sound barrier walls to identify engineering conflicts or constraints affecting the sound barrier design. The Concessionaire is responsible for documenting any resolutions to engineering issues/conflicts that preclude the construction or that require modification to the recommended sound barriers. Resolution of any engineering issues will be subject to approval by the CMT prior to construction.

A Noise Study Reevaluation Report will be prepared CDC that will summarize the methodology, results, and recommendations based on the design changes proposed by the Concessionaire as well as the previous Design Change reevaluation. In addition, this report will include the results of the sound barrier surveys, document the changes in the recommended sound barriers since the PD&E Study, and describe the locations and dimensions of those sound barriers recommended for design and construction.

Residential areas adjacent to the Project limits may be affected by noise and vibration associated with construction activities. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the FDOT Specifications and the Concessionaire's Vibration Monitoring Plan.

## 17.0 PROJECT CLOSEOUT PLAN

As required in Vol II Div II Sect 5 of the Contract Documents, at the end of the contract term the Concessionaire will guarantee that the Project will be handed back to FDOT in a good and operable condition, and that all elements of the Project within the O&M limits will comply with the Handback Requirements and will be in the desired maintenance condition. The Concessionaire will develop a capital replacement plan for the equipment, systems, assets, etc., that are to be replaced, overhauled, refurbished, or rehabilitated over the term of the contract. That plan will help ensure that the equipment, systems, assets, etc. remain safe, modern, and efficient to operate and maintain, and retain their asset value. The Concessionaire shall rehabilitate any asset that has reached the end of its design life, cannot be maintained to perform within the specified performance requirements, exhibits a measurably higher failure rate, or ceases to be economical to maintain due to excessive deterioration or obsolescence.

The approach at handback is for the Concessionaire and the FDOT to work jointly to agree on the capital investments that will have to be completed before the expiration of the contract. For this purpose, it is proposed to provide as-built drawings of the Project opening and to carry out specific inspections during the last 5 years prior to the handback to guarantee that the initial functionalities are working at the desired level.

The Concessionaire shall handback all software special tools, special equipment for ITS, spare parts, and assemblies that were purchased to support the O&M work. The Concessionaire will identify the assets and indicate those that are leased and those that were purchased to support the O&M work scope. The Concessionaire will provide maintenance training to FDOT personnel upon the completion of the contract so the FDOT personnel have a complete understanding of the maintenance program, plans, reports and activities related to the operation and maintenance of the Project.

The software, spares and assemblies shall be transferred to FDOT in a safe, fully functioning and operable condition that has been verified through demonstration testing conducted by the Concessionaire and witnessed by the FDOT or its designee. The detailed requirements of the demonstration testing and the required condition of assets at handback are included in Vol II Div II Sect 5 of the Contract Documents.

## 18.0 APPENDICES

**EXHIBIT A – LIST OF ACRONYMS**

**EXHIBIT B – REFERENCE HYPERLINKS**

**EXHIBIT C – PROJECT CORRIDOR MAP**

**EXHIBIT D – I-595 TYPICAL SECTION**

**EXHIBIT E – EXPRESS LANES DIAGRAM**

**EXHIBIT F – PROJECT ZONES DIAGRAM**

**EXHIBIT G – CONCESSIONAIRE PROJECT MANAGEMENT PLAN**

**EXHIBIT H – CORRIDOR MANAGEMENT ORGANIZATION CHART**

**EXHIBIT I – FHWA FLORIDA DIVISION ORGANIZATION CHART**

**EXHIBIT J – FDOT D4 ORGANIZATION CHART**

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange

## Broward County, Florida

## EXHIBIT A – LIST OF ACRONYMS

# LIST OF ACRONYMS



| | |
|---|---|
| **ACOE** | US Army Corps of Engineers |
| **ACSID** | ACS Infrastructure Development |
| **ADA** | Americans with Disabilities Act |
| **AN** | Advanced Notification |
| **ATC** | Alternative Technical Concepts |
| **BCEPD** | Broward County Environmental Protection Department |
| **BRT** | Bus Rapid Transit |
| **CADD** | Computer Aided Drafting and Design |
| **CAP** | Community Awareness Plan |
| **CAT** | Corridor Advisory Team |
| **CBE-WTAA** | Central Broward East-West Transit Alternatives Analysis |
| **CBWCD** | Central Broward Water Control District |
| **CCEI** | Construction Engineering & Inspection Consultant |
| **CCTV** | Closed Circuit Television |
| **CDC** | Corridor Design Consultant |
| **C-D** | Collector-Distributor |
| **CEI** | Construction Engineering & Inspection |
| **CERCLA** | Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund) |
| **CFR** | Code of Federal Regulations |
| **CIR** | Community Involvement Roundtable |
| **CITS** | Consultant Invoice Transmittal System |
| **CMP** | Corridor Master Plan |
| **CMS** | Changeable Message Sign |
| **CMT** | Corridor Management Team |
| **CPA** | Certified Public Accountant |
| **CPAM** | Construction Project Administration Manual |
| **CQMP** | Construction Quality Management Plan |
| **CSER** | Contamination Screening Evaluation Report |
| **CSRP** | Conceptual State Relocation Plan |
| **DBE** | Disadvantaged Business Enterprise |
| **D/B/F/O/M** | Design, Build, Finance, Operate and Maintain |
| **DCCM** | District Contract Compliance Manager |
| **DCEC** | District Construction Environmental Coordinator |
| **DCIC** | District Contamination Impact Coordinates |
| **DMS** | Dynamic Message Signs |
| **DQMP** | Design Quality Management Plan |
| **DRB** | Disputes Review Board |
| **EAG** | Emergency Access Gates |
| **EDMS** | Electronic Document Management System |
| **EEO** | Equal Employment Opportunity |
| **ELDP** | Express Lanes Demonstration Program |
| **EMO** | Environmental Management Office |
| **EOC** | Executive Oversight Committee |
| **EOR** | Equal Opportunity Report |
| **EPA** | Environmental Protection Agency |
| **ERP** | Environmental Resource Permit |
| **ETC** | Electronic Toll Collection |
| **FAA** | Federal Aviation Administration |

# LIST OF ACRONYMS



| | |
|---|---|
| **FAP** | Federal Aid Project |
| **FAQ** | Frequently Asked Question |
| **FDEP** | Florida Department of Environmental Protection |
| **FDOT** | Florida Department of Transportation |
| **FDOT D4** | Florida Department of Transportation, District 4 |
| **FHWA** | Federal Highway Administration |
| **FIHS** | Florida Intrastate Highway System |
| **FPL** | Florida Power & Light |
| **FPR** | Florida Petroleum Reprocessors |
| **FTE** | Florida's Turnpike Enterprise |
| **GIS** | Geographic Information System |
| **HAR** | Highway Advisory Radio |
| **HCS** | Highway Capacity Software |
| **IFP** | Initial Financial Plan |
| **IPD** | Indicative Preliminary Design |
| **ITMS** | Interim Transportation Management System |
| **ITP** | Instructions to Proposers |
| **ITS** | Intelligence Transportation System |
| **JPA** | Joint Participation Agreements |
| **LDCA** | Location Design Concept Approval |
| **LIMS** | Laboratory Management Information System |
| **LPA** | Locally Preferred Alternative |
| **LRT** | Light Rail Transit |
| **MAP** | Maximum Availability Payment |
| **MOA** | Memorandum of Agreement |
| **MOT** | Maintenance of Traffic |
| **MPO** | Metropolitan Planning Organization |
| **MSE** | Mechanically Stabilized Earth |
| **MUTCD** | Manual on Uniform Traffic Control Devices |
| **MVDS** | Microwave Vehicle Detection Station |
| **NEPA** | National Environmental Policy Act |
| **NNRC** | North New River Canal |
| **NPDES** | National Pollutant Discharge Elimination System |
| **NTP** | Notice to Proceed |
| **O&M** | Operations and Maintenance |
| **O&M-QMS** | Operations and Maintenance Quality Management System |
| **OCEI** | Oversight Construction Engineering & Inspection |
| **OJT** | On the Job Training |
| **OPWCD** | Old Plantation Water Control District |
| **OSHA** | Occupational Safety & Health Administration |
| **P3** | Public-Private Partnership |
| **PAID** | Plantation Acres Improvement District |
| **PD&E** | Project Development & Environment |
| **PI** | Public Involvement |
| **PIC** | Public Information Consultant |
| **PIIMS** | Public Involvement Information Management System |
| **PIM** | Project Information Memorandum |
| **PIO** | Public Information Officer |

# LIST OF ACRONYMS



| | |
|---|---|
| **PIP** | Public Involvement Program |
| **PIR** | Public Involvement Report |
| **PMP** | Project Management Plan |
| **PPM** | Plans Preparation Manual |
| **PSR** | Project Status Report |
| **QA** | Quality Assurance |
| **QC** | Quality Control |
| **QMS** | Quality Management System |
| **RAS** | Review Appraisal Statement |
| **RFP** | Request for Proposal |
| **RFQ** | Request for Qualifications |
| **RISC** | Rapid Incident Scene Clearance |
| **ROW** | Right of Way |
| **SAFETEA-LU** | Safe, Accountable, Flexible Efficient, Transportation Equity Act – A Legacy for Users |
| **SEP** | Special Experimental Project |
| **SFWMD** | South Florida Water Management District |
| **SIRV** | Severe Incident Response Vehicle |
| **SIS** | Strategic Intermodal System |
| **SOQ** | Statement of Qualifications |
| **SOV** | Schedule of Values |
| **SWPPP** | Stormwater Pollution Prevention Plan |
| **TCP** | Traffic Control Plan |
| **THISCD** | Tindall Hammock Irrigation & Soil Conservation District |
| **TIFIA** | Transportation Infrastructure Finance & Innovative Act |
| **TMC** | Traffic Management Center |
| **UAO** | Utility Agency Owner |
| **USCG** | US Coast Guard |
| **USDOT** | US Department of Transportation |
| **USPAP** | Uniform Standards of Professional Appraisal Practice |
| **VE** | Value Engineering |
| **VE/DR** | Value Engineering / Design Review |
| **VPN** | Virtual Private Network |
| **WTS** | Worksite Traffic Supervisor |

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

# From I-75 Interchange to I-95 Interchange
# Broward County, Florida

## EXHIBIT B – REFERENCE HYPERLINKS

# Reference Hyperlinks
## 1 of 3

| Document | URL |
|---|---|
| PMP DOCUMENT REFERENCES | http://www.i-595.com/PMP/Forms/AllItems.aspx |
| LDCA Approval - Type 2 CATEX | http://i-595.com/PMP/I-595%20LDCA%20Approval_Type%202%20CATEX_06-29-06.pdf |
| Design Change Reevaluation | http://i-595.com/PMP/I-595%20Design%20Change%20Reevaluation_11-28-07.pdf |
| Construction Advertisement Reevaluation | http://i-595.com/PMP/I-595%20Construction%20Advertisement%20Reevaluation_04-08-08.pdf |
| Concessionaire Environmental Compliance Plan | http://i-595.com/PMP/Concessionaire%20Environmental%20Compliance%20Plan_May%2009.pdf |
| Contract Documents | http://www.i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fContract%20Documents |
| Vol. I | http://www.i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fContract Documents%2fVol I - Concession Agreement |
| Concession Agreement | |
| Concession Agreement Appendices | |
| Vol. II - Technical Requirements | http://www.i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fContract Documents%2fVol II - Technical Requirements |
| Division I – General Requirements and Covenants<br>Division II – Special Provisions<br>Section 1 – Project Description<br>Section 2 – Project Requirements and Provisions for Work<br>Section 3 – Design and Construction Criteria<br>Attachment 1 – ITS Deployment Requirements<br>Attachment 2 – FTE's Tolling Infrastructure Support Requirements<br>Attachment 3 – Concessionaire CEI Requirements<br>Section 4 – Operations and Maintenance Requirements<br>Section 5 – Handback Requirements<br>Section 6 – Value Added Specifications | |
| Vol. III - Additional Mandatory Standards | http://www.i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fContract Documents%2fVol III - Additional Mandatory Stds |
| Tree Relocation JPA's | http://www.i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fTree Relocation JPAs |
| Town of Davie | |
| City of Plantation | |
| Broward County | |
| FDOT / Broward Co. Greenway MOA | http://www.i-595.com/PMP/Broward%20County%20Greenways%20MOA_exec%20agrmt.pdf |
| FHWA Responsibilities Matrix | http://i-595.com/PMP/FHWA%20Responsibilities%20Matrix.pdf |
| Concessionaire Design Quality Management Plan | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fConcessionaire Design Quality Management Plan - June 09 |
| Concessionaire Construction Quality Control Management Plan | http://i-595.com/PMP/Concessionaire%20Constr%20QC%20Management%20Plan_June%2009.pdf |
| OCEI Quality Assurance Plan | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fOCEI Quality Assurance Plan |
| Concessionaire Preliminary O&M Manuals | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fPrelim O-and-M Manuals - May 09 |
| Preliminary O&M Manual (Construction Period) | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fPrelim O-and-M Manuals - May 09%2fPreliminary O-M Construction - 05-04-09 |

# Reference Hyperlinks
## 2 of 3

| | |
|---|---|
| **VOL. I** | |
| **Section 1.0 - O&M Plan**<br>**Section 2.0 - O&M Manuals**<br>**Section 3.0 - Renewal Work Plan**<br>**Section 4.0 - Bridge Inspections and Maintenance**<br>**- Permit Plan**<br>**- Transition Plan**<br>**- Emergency Response Plan** | |
| **VOL. II** | |
| **Section 5.0 - Quality Management System**<br>**Section 6.0 - Safety Plan**<br>**Section 7.0 - Reporting Requirements** | |
| **Preliminary O&M Manual (Operating Period)** | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fPrelim O-and-M Manuals - May 09%2fPreliminary O-M Operations - 05-04-09 |
| **VOL. I** | |
| **Section 1.0 - O&M Plan**<br>**Section 2.0 - O&M Manuals**<br>**Section 3.0 - Renewal Work Plan**<br>**Section 4.0 - Bridge Inspections and Maintenance**<br>**- Permit Plan**<br>**- Maintenance Rating Program**<br>**- Emergency Response Plan** | |
| **VOL. II** | |
| **Section 5.0 - Quality Management System**<br>**Section 6.0 - Safety Plan**<br>**Section 7.0 - Reporting Requirements** | |
| **I-595 Design Review Handbook** | http://i-595.com/PMP/I-595%20Design%20Review%20Handbook_July%2009.pdf |
| **I-595 Value for Money Analysis** | http://i-595.com/PMP/I-595%20VfM%20Analysis_June%202009.pdf |
| **P3 Procurement Organization Charts** | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fP3 Procurement Org Charts |
| **Request for Qualifications (RFQ)** | http://i-595.com/PMP/I-595%20RFQ%20Add%202%20-%20w%20rider%20and%20PIM%20-%20_10-24-07.pdf |
| **Instructions to Proposers (ITP)** | http://i-595.com/PMP/I-595%20-%20ITP_Addendum%207_09-04-08.pdf |
| **FHWA Project Approvals** | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fFHWA Project Approvals |
| **PMP Approval Ltr (2/21/07)**<br>**I-595 SEP-14 Approval (4/17/08)**<br>**I-595 Initial Finance Plan Approval (4/18/08)**<br>**FHWA Authorization Conditions (4/18/08)**<br>**SEP-15 Acceptance (4/22/08)**<br>**I-595 Concurrence in Award (10/28/08)**<br>**ELDP Application Acceptance (7/1/09)** | |
| **Initial Financial Plan** | http://i-595.com/PMP/I-595%20Initial%20Financial%20Plan_%20Final_03-08-2008.pdf |

# Reference Hyperlinks
## 3 of 3

| | |
|---|---|
| **FHWA Cost Estimate Review** | http://i-595.com/PMP/FHWA%20I-595%20Cost%20Est%20Review_03-09.pdf |
| **OCEI Project Business Plan** | http://i-595.com/PMP/OCEI%20I-595%20Business%20Plan_02-10-09.pdf |
| **Community Awareness Plan (CAP)** | http://i-595.com/PMP/I-595%20Community%20Awareness%20Plan_draft.pdf |
| **CONTRACT DOCUMENT GOVERNING REGULATIONS** | |
| **Refer to Vol II Div II Sect. 2.A of the Contract Documents** | http://i-595.com/PMP/Forms/AllItems.aspx?RootFolder=%2fPMP%2fContract Documents%2fVol II - Technical Requirements |
| **I-595 PD&E DOCUMENTS (14 total)** | http://www.i-595.com/docs.aspx |
| **1) Type 2 Categorical Exclusion** | |
| **2) Preliminary Engineering Report** | |
| **Appendix A - Public Involvement Report** | |
| **Appendix B - Existing Conditions** | |
| **Appendix C - Alternative Concept Plans** | |
| **Appendix D - Preferred Alternative Concept Plans** | |
| **Appendix E - Water Quality Impact Evaluation Checklist** | |
| **Appendix F - Noise Study Report Summary** | |
| **3) Contamination Screening Evaluation Report** | |
| **4) Value Engineering / Design Review Documentation** | |
| **5) Preliminary Drainage and Pond Sitting Report** | |
| **6) Essential Fish Habitat Assessment** | |
| **7) Cultural Resource Assessment Survey** | |
| **8) Air Quality Report** | |
| **9) Programmatic Section 4(f) Evaluation** | |
| **10) Wetland Evaluation Report** | |
| **11) Endangered Species Biological Assessment** | |
| **12) Noise Study Report** | |
| **13) Conceptual Stage Relocation Plan** | |
| **14) Systems Interchange Modification Report (SIMR) - I-595 from I-75 to I-95** | |

# PROJECT MANAGEMENT PLAN

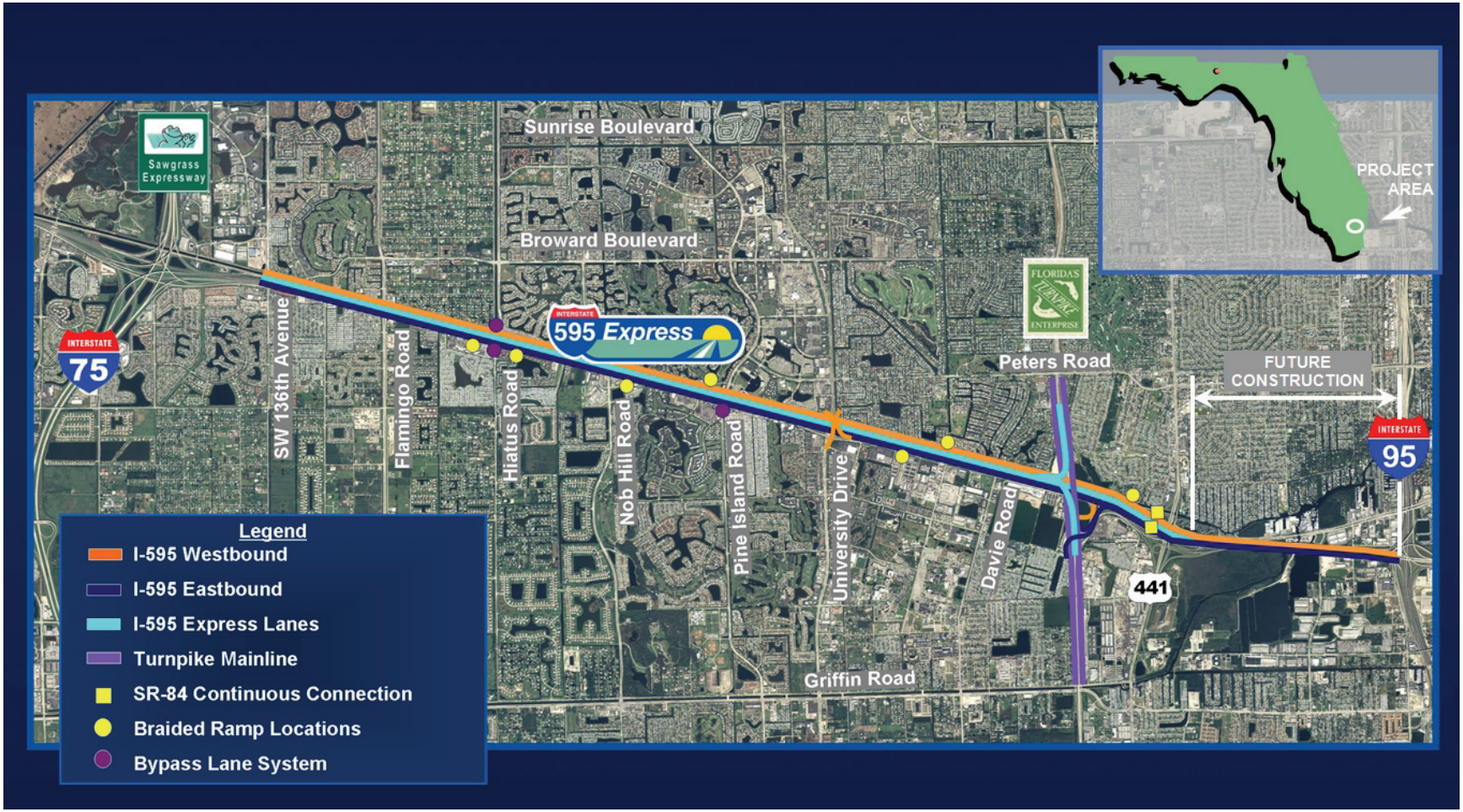
# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT C – PROJECT CORRIDOR MAP

Exhibit C - Project Corridor Map



# PROJECT MANAGEMENT PLAN

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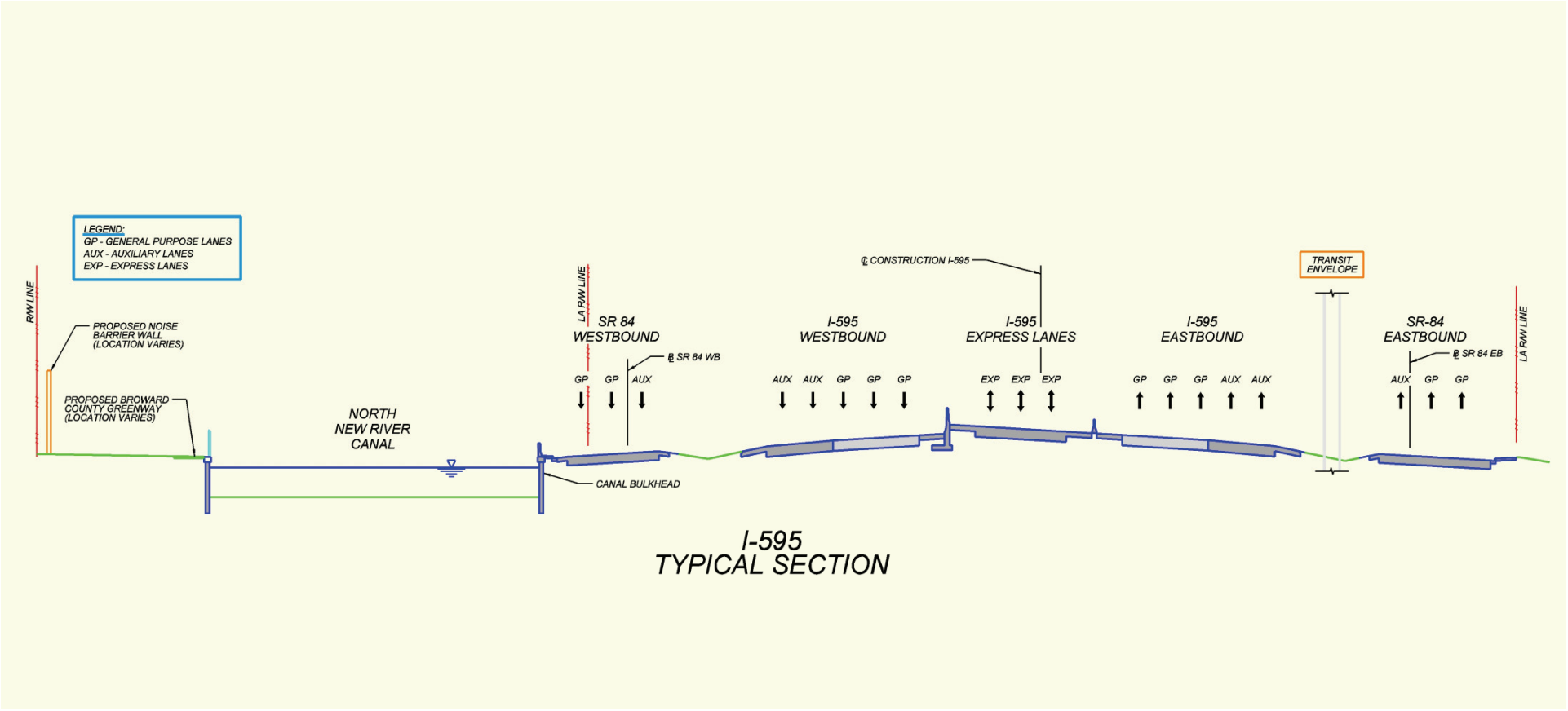
# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT D – I-595 TYPICAL SECTION

# Exhibit D – I-595 Typical Section




I-595
TYPICAL SECTION

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT E – EXPRESS LANES DIAGRAM

Exhibit E – Express Lanes Diagram

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT F – PROJECT ZONES DIAGRAM

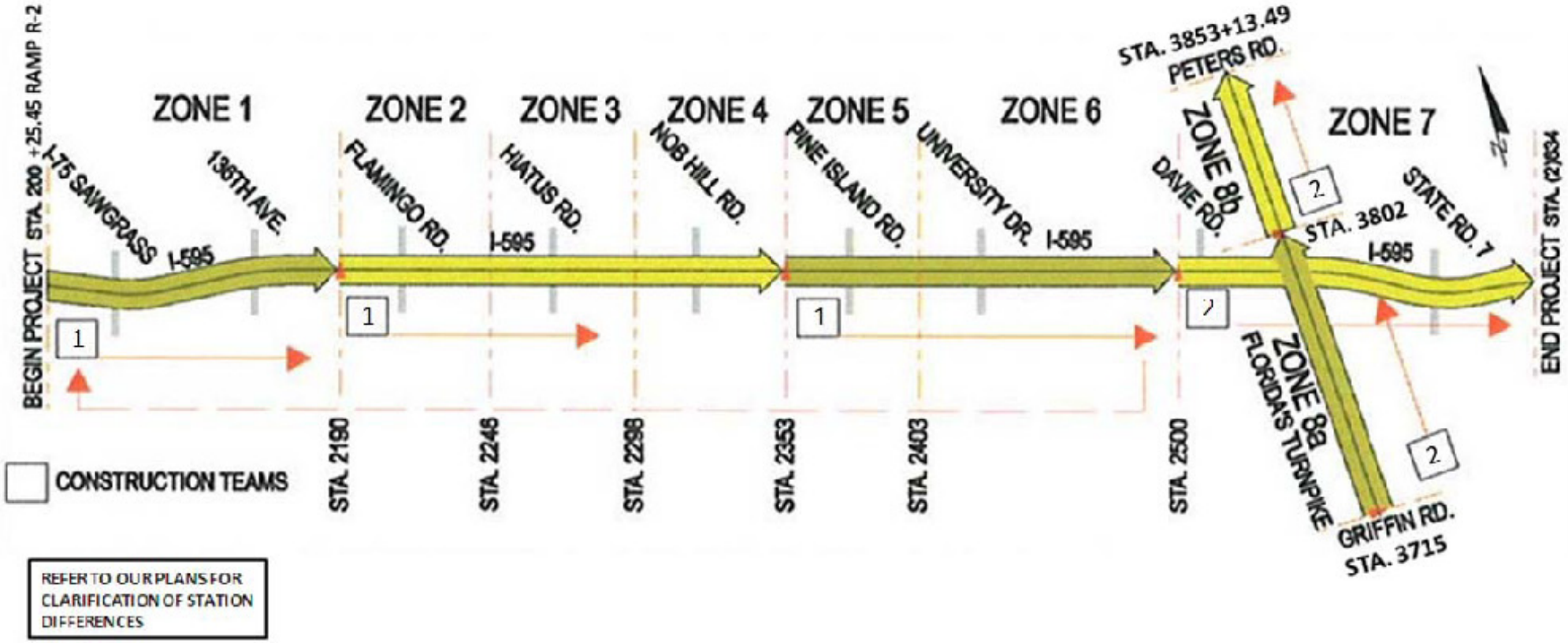



Exhibit F - Project Zones Diagram

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT G – CONCESSIONAIRE PROJECT MANAGEMENT PLAN

# PROJECT MANAGEMENT PLAN

*Construction PMP July 2009 V1*

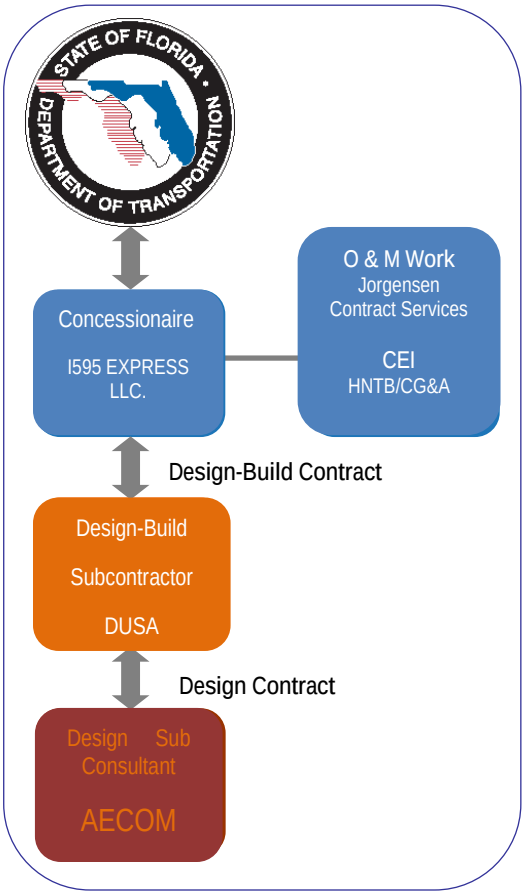
# TABLE OF CONTENTS

# 1 Introduction

The I-595 Corridor Improvements Project (Project) organization consists of a team of renowned international and local companies assembled specifically for the design, construction, financing, operations, and maintenance of the Project in response to the Contract Documents (Contract), which includes the Concession Agreement, Technical Requirements, and other documents referenced in the Request for Proposals (RFP). Our partnership is synonymous with world-class development of infrastructure projects and brings significant financial capabilities and considerable experience in availability payment transactions, combined with expertise in facility design, construction, operations, and maintenance, all focused on bringing the best value to FDOT.

The Project Team organization consists of the Concessionaire, formed by I-595 EXPRESS LLC (I-595 EXPRESS LLC); O & M Contractor (During first 3 years of Construction) Jorgensen Contract Services (Jorgensen), the Construction or Design-Build Contractor, formed by Dragados USA, Inc. (DUSA); the Engineer, or Designer, AECOM Technology Corporation, Inc. (AE) and the Construction, Engineering and Inspection Team led by HNTB/Calvin, Giordano & Associates (CEI).Collectively, the Project Team will be referenced as the I-595 EXPRESS Team throughout this PMP. Graphically, the contractual relationship between each of the primary Project participants is summarized in Figure 1.1.

*Figure 1.1 Contractual Organization*




Management of the I-595 EXPRESS Team will be guided by the Project Management Plan (PMP). This PMP has been developed by I-595 EXPRESS LLC and describes the strategies and approach to manage the development, design, construction, operation, and maintenance of the Project and meet the requirements of the Contract. The PMP provides the basic structure of the I-595 EXPRESS Team's organization and a description of the roles, responsibilities, and work to be accomplished by each member of the I-595 EXPRESS Team and each sub-organization, including identified subcontractors and suppliers. The PMP is intended to provide the I-595 EXPRESS Team with a summary of the practices and procedures to be used in the day-to-day management of the Project's delivery. Its purpose is to enhance the quality of the I-595 EXPRESS Team's services and to facilitate good operational communication across the aggregate organization regardless of discipline, responsibility, or location.

The PMP objectives are as follows:

- Reinforce commitment to safety as a primary goal
- Integrate design, construction, and O&M into a cohesive team
- Minimize duplication of effort and create efficiency
- Simplify coordination efforts between various functions
- Establish interface procedures and protocols
- Establish an atmosphere of partnership with FDOT
- Achieve quality and value
- Encourage stakeholder participation

The original PMP was produced for the NTP1 and now it is being reviewed to include the new updates on the Project regarding the commencement of the construction work. New updates will be realised to incorporate substantial changes in the Management Process.

# 2 Team Organization

The I-595 EXPRESS Team was formed to bring together an outstanding international team of companies who have the relevant expertise, knowledge and experience to make the Project a success. Led by the equity members forming I-595 EXPRESS LLC, the Concessionaire is supported by an exceptional group of designers and builders. Each builder in their own right is an experienced and successful construction firm that combined brings considerable local and international experience on large-scale transportation projects in highly congested urban environments. Similarly during design, AE will be supported by firms such as MACTEC Engineering and Consulting, Inc.; Greenhorne & O'Mara, Inc.; Kimley-Horn and Associates, Inc.; F.R. Aleman & Associates, C3TS, PA; Curtis + Rogers Design Studio Inc.,R. J. Behar & Company and Beiswenger, Hoch and Associates, CECOS Environmental, Bolton Perez and Associates and HBC Engineering.. Each of these firms brings unique local project familiarity, innovative design experience on similar major projects, and extensive resources and staff expertise. As for the Operations and Maintenance (O&M) component of the Project, these responsibilities will be undertaken by Jorgensen Contract Services, LLC for the first three years of construction, followed after by I-595 EXPRESS LLC as self operators, which brings extensive and proven experience in highway O&M through I-595 EXPRESS LLC.

The Concessionaires CEI Team will be led by HNTB Corporation together with Calvin Giordano and Associates (CGA). They have been contracted by I-595 Express LLC for this concession. The CEI's Processes and Procedures are referenced in Appendix 11.8 and 11.9.

One final, but important member of the I-595 EXPRESS Team are those companies, firms, suppliers, and vendors that will comprise I-595 EXPRESS LLC's commitment to the Disadvantaged Business Enterprise (DBE) goal set forth in the Contract. I-595 EXPRESS LLC recognizes and supports the need to engage the DBE community in the design, construction, and operations markets and commits to do their best effort in meeting the 8.1% goal. The following actions have been taken to meet this goal:

- I-595 EXPRESS LLC and DUSA are utilizing the FDOT DBE & Miami Dade websites to verify DBE firms.
- Running ads in local newspapers.
- Pre-qualifying all DBE's who express an interest to bid on the project.
- Running outreach programs to inform potential DBE's of project opportunities.
- Holding DBE utilization meetings.

The DBE Utilization Plan has been submitted and approved by DOT. See Appendix 11.12.

The organizational charts of I-595 EXPRESS LLC, Jorgensen, HNTB, DUSA, and AE are illustrated in Appendices 11.1, 11.2, 11.3, 11.4, and 11.5.

*Management Contact Information (I-595 Express LLC):*

| Name | Contact | Role |
|---|---|---|
| *Alvaro Muelas* | *954-513-3200* | *Chief Executive Officer* |
| *Ricardo Urien* | *954-513-3200* | *Technical Director* |
| *Robert Correia* | *954-513-3200* | *Operations Director* |
| *David Norwell* | *954-513-3200* | *Design Manager* |
| *Diana Maldonado* | *954-513-3200* | *Construction Manager* |
| *Juan Kuthy* | *954-513-3200* | *ITS Coordinator* |
| *Chuck Henningsgaard* | *301-831-1000* | *Jorgensen O & M Sub-Contractor Lead* |
| *Shannon Snyder, PE(CGA)* | *305-216-456* | *CEI Resident Engineer* |

*Management Contact Information (Dragados USA):*

| Name | Contact | Role |
|---|---|---|
| *Juan Miguel Perez Rodriguez* | *954-668-2015* | *Project Manager* |
| *Rafael Molina* | *954-668-2015* | *Engineering Manager/Deputy Project Manager* |
| *Richard Dun* | *954-668-2015* | *Construction Manager* |
| *Victor Zozaya* | *954-668-2015* | *Construction QC Manager* |
| *Michael Spyra* | *954-668-2015* | *Health and Safety Officer* |
| *Daniel Ruiz* | *954-668-2015* | *Structures General Manager* |
| *Juan Hernandez* | *954-668-2015* | *Roadway General Manager – Zones 1 – 6* |
| *Norberto Garcia* | *954-668-2015* | *Roadway General Manager – Zones 7, 8a & 8b* |
| *Juan Hernandez (Acting)* | *954-668-2015* | *Utility Manager* |
| *Jhon Beltran* | *954-668-2015* | *Engineering Project Manager* |
| *Edwin Cortes* | *954-668-2015* | *Engineering Support Project Manager* |
| *Jesus Diez* | *954-668-2015* | *Advanced Construction Manager* |
| *Imanol Perez* | *954-668-2015* | *Project Business Manager* |
| *David Lagan* | *954-668-2015* | *Purchasing Manager* |
| *Isa Carreras* | *954-668-2015* | *Human Resources* |
| | | |

*Management Contact Information (AE):*

| Name | Contact | Role |
|---|---|---|
| *Michael Shapiro* | *305-716-5143* | *Project Manager* |
| *Rey Rivas* | *305-716-5142* | *Design Manager* |
| *Wally Jordan* | *919-854-6222* | *Lead Engineer* |
| *Buddy Hudson* | *954-745-7258* | *Design Quality Manager* |
| *Gorky Charpentier* | *954-513-3840* | *Roadway Discipline Lead* |
| *Saul Perez* | *954-513-3874* | *Structure Discipline Lead* |
| *Eduardo Curiel* | *954-513-3835* | *Drainage Discipline Lead* |
| *Steve Duda* | *864-234-3595* | *Environmental Discipline Lead* |
| *Vivek Reddy* | *954-745-7267* | *Traffic, Signals, and Sign Discipline Lead* |
| *Pedro Ugas* | *305-445-2900 Ext: 2248* | *Utilities Discipline Lead* |
| *Scott Dixon* | *954-513-3881* | *Computer/CADD Coordinator* |
| *Libertad Vargas* | *865-220-7753* | *Project Controls Lead* |
| *Angela Alba* | *305-818-8407* | *Geotechnical Discipline Lead* |
| *John Adler* | *561-686-7707* | *Survey Discipline Lead* |
| *Aida Curtis* | *305-442-1744* | *Landscaping and Aesthetics* |

## 2.1 CONCESSIONAIRE ORGANIZATION

I-595 EXPRESS LLC's organization chart presented in Appendix 11.1 illustrates the organizational for the construction period. The key personnel committed to work on this Project will fill the following roles:

### Chief Executive Officer:

The Chief Executive Officer or Project Executive (referred to in this document as CEO) is responsible for the performance of the entire I-595 EXPRESS LLC Team. He will act as a single point of contact on all matters on behalf of the Concessionaire. He is responsible for overseeing and directing the functions necessary to achieve efficient management of project resources and successfully guide project focus with an emphasis on safety, reliability, and availability. The Chief Executive Officer will develop and implement project policies and procedure consistent with FDOT requirements, as well as plan, direct, and coordinate operational activities. Responsibilities will include project planning, financial planning, budgeting/cost controls, project accounting, scheduling, records/reporting, and communication.

### Operations and Maintenance Director:

The Operations and Maintenance Director is responsible for providing direction and oversight for the performance O & M of the contract for the Concessionaire during the construction period including the maintenance of the ITS system. During the O&M period, he is responsible for all operations and maintenance functions overseeing all periodic and routine maintenance work activities required during the concession period. The Operations and Maintenance Director will develop a detailed annual maintenance work program for budgeting, planning, and resource procurement. He will be responsible for the sub-contracting of

maintenance that cannot be completed by in house project staff. The Operations and Maintenance Director will also be responsible for procuring all necessary equipment, spare parts, and inventory for the Project. He is also responsible for supplying proper training to his staff. He will also create a dedicated maintenance management system for all maintenance needs, as well as specified documents and reporting system for top management, FDOT, and others.

Technical Director:
The Technical Director will be responsible for the day-to-day coordination between the design-build team and the Concessionaire including acting as the liaison for the operations and maintenance needs. The Technical Director will be the recipient of all design and construction related information, submittals, and required reports and is responsible for their review for contract conformity prior to releasing them to the Operations and Maintenance Director, for distribution to FDOT or other required recipients. The Technical Director will also be responsible for the maintenance and oversight of the design-build contract and preparation of any necessary modifications or amendments to the scope of services performed by the contractor. In addition, the Technical Director will also develop procedures to implement policies issued by the Operations and Maintenance Director, will be the primary facilitator of any meetings between FDOT and the design-build team, reviewer of the construction schedule for conformity with milestone dates. The Technical Director will also be the liaison for the Concessionaire CEI and will ensure they are getting everything necessary to perform oversight on the job site.

ITS Manager:
The ITS manager is responsible for the operations and maintenance of the Intelligent Transportation System (ITS) equipment and for providing services to support information technology functions throughout the Project. He/she will work with the engineering group to provide technology enhancements as needed to fulfil ITS requirements. The ITS Manager develops procedures to implement information technology policies issued by the Project Executive, supervises the ITS operations, IT staff, and TMC control room staff.

Quality Manager:
The Quality Manager is responsible for the development and implementation of the Quality Management System (QMS). Reports will be generated as a means to gauge performance against FDOT requirements. The Quality Manager will also be responsible for identifying actions necessary to prevent nonconformities and will track Non-compliance Points. He will be responsible for overseeing auditing of Project processes and for the nonconforming service control, data analysis, and improvement. Additional responsibilities include analysis and recommendation of appropriate changes of policies and procedures, auditing of existing and new ISO Procedures, coordinating and administering quality audits, maintaining the corrective/preventive action program, providing monthly reports to the Chief Executive Officer, improving processes, and reviewing engineering support process and quality functions. The Quality Manager will insure the CEI is provided with the necessary information and documentation to perform their scope of work and will manage their efforts regarding Quality Control.

Other principal functions, which also appear in the organization chart, are presented below:

- The ITS Manager is responsible for the operations and maintenance of the Intelligent Transportation System (ITS) equipment and for providing services to support information technology functions throughout the Project. He/she will work with the engineering group to provide technology enhancements as needed to fulfil ITS requirements. The ITS Manager develops procedures to implement information technology policies issued by the Chief Executive Officer, supervises the ITS operations, IT staff, and TMC control room staff.

- The Public Information Officer is responsible for developing and implementing the procedures for coordination and communications between the Concessionaire and other stakeholders. He is the primary Project contact for public media personnel and disseminates information as required to public and private organizations and the general public. The PIO is responsible delivering to FDOT technical data for the Project Website, supported by FDOT. He will meet with citizens and private groups to assist in resolving issues and concerns. He is also responsible for developing communication and information dissemination procedures to implement policies issued by the Chief Executive Officer.
- The Legal Advisor will be a locally hired attorney who is knowledgeable in construction, maintenance, and transportation issues. He/she will be responsible for all legal matters associated with the Project and will advise the Concessionaire concerning preparation and execution of the Contract, preparation of subcontractor agreements, utility dispute resolution, any public claims against the Concessionaire, and human resource/disability claims. Outside legal support will be managed by the Legal Advisor. Besides the legal Advisor will be responsible for the monitoring of the Contract general compliance.
- The Safety Officer will perform dual functions of overseeing overall project safety and traffic safety. He/she will be involved with traffic and incident management activities and will audit that proper procedures are followed for Maintenance of Traffic (MOT) set-ups; traffic control during emergencies, and hurricane evacuation programs. The Safety Officer will coordinate the annual mock hurricane evacuation drill in coordination with the O&M Department and FDOT personnel. The Safety Officer will also perform routine safety inspections, keep required OSHA records, audit that proper procedures are being followed for Construction and O&M work. Additionally, the Safety Officer will monitor the implementation of the overall project Safety Plan, safety contingency plans, work site safety training, drug testing, OSHA and State safety compliance, and testing of staff for MOT certification.
- The Finance and Human Resources Director is responsible for planning, directing, and coordinating all project financial and human resource activities. This Finance/HR Director is responsible for creating a project financial management and accounting system, as well as monthly statements and making adjustments based on performance ratings. Responsibilities also include the annual Financial Plan, contact with all financial entities, preparing money movements, improving profitability, updating the Chief Executive Officer, general accounting, recording and controlling all funds, controlling budget allocations, and the secure placing of investments. Other responsibilities include reviewing and evaluating compliance issues/concerns. The Finance/HR Director will also be the designated liaison for the Project's DBE Program. Finally, this position will also have responsibility for human resources functions, such as decisions related to personnel hiring, position assignment, training, benefits, and compensation.
- The Engineering Manager is responsible for securing technical advice and engineering support to Technical Director, The Engineering Manager researches technical topics and provides assistance directly or identifies contract and other outside assistance, establishes qualifications, writes specifications and contract terms, and contracts with firms or individuals who can provide the appropriate technical assistance. This role will require developing procedures to implement technical-related policies issued by the Technical Director, supervising in-house staff assigned from the engineering group, and overseeing contracts for technical services and consulting.
- The Construction Manager is responsible for coordinating CEI activities and acts as a liason between the CEI the OCEI and the main contractor. The Construction Manager, will assist the Quality Manager in writing procedures and auditing subcontractors. The Construction Manager will conduct continues site inspections and will assist the Technical Director in the general overview of the construction activities. An important part of the Construction Manager will be to follow the main contractor construction schedule and recommend to the Technical Director actions to be taken to avoid delays and non conformance.

- The Office Manager is responsible for the day to day operation of the project office. Including accounting, assisting management, record keeping, travel arrangements, correspondence, document management, scheduling, etc.

### 2.1.1 Operations and Maintenance Sub-Contractor:

- For the first three years of construction I-595 EXPRESS LLC will sub-contract Jorgensen Contract Services to perform all routine maintenance on the project corridor. Jorgensen's organization is located in Appendix11.2. Jorgensen Contract Services will be responsible all maintenance both routine and non-routine that is necessary on the project. Jorgensen Contract Services will have a staff of laborers, managers, and any other necessary staff to complete maintenance activities. Jorgensen Contract Services may sub-contract certain activities, including but not limited to NBIS Bridge Inspection, major pavement intervention, hazardous material cleanup, etc. All repairs will be performed in compliance with FDOT approved practices, materials, and procedures. An on staff maintenance crew shall be responsible for routine maintenance. This maintenance will be part of a routine maintenance plan that includes necessary materials, time, labor, and equipment that is needed to successfully complete the maintenance procedure. The maintenance contractor will comply will all specified time frames provided by FDOT in the O & M Guidelines that specify cure times and level of service in the contract. The following personnel will facilitate this contract. Descriptions of each personnel can be seen on the detailed Organization Chart provided by Jorgensen Contract Services.
    - Executive Leadership
    - Financial Management
    - Engineering and Technical Support
    - Safety Director
    - Regional Manager
    - Field Superintendent
    - O & M Contractor Principle
    - Q/A Manager
    - QA Engineer
    - Field O & M QC Manager
    - Administration
    - Operations Supervisor
    - Maintenance Supervisor
    - TMC Supervisors

### 2.1.2 Concessionaire's CEI:

The Concessionaires CEI organization is located in Appendix 11.3 and includes the following positions.

Resident Engineer:

The Resident Engineer will be responsible for coordinating all of the field inspection and observation as well as developing and implementing all necessary CEI processes and procedures. The Resident Engineer will be ultimately responsible for the CEI team's duties in monitoring and inspecting the construction activities such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions for the construction contract.

Sr. Project Engineer for Project Start Up and Advanced Construction Activities: The Sr. Project Engineer will be responsible for coordinating the mobilization of administrative and field personnel, assemble the field office and procure necessary equipment, as well as assist in the development and implementation of

all necessary CEI processes and procedures. In addition, the Sr. Project Engineer will be responsible for directing the inspection staff in monitoring and inspecting the construction operations with respect to the Advanced Construction Activities.

### Sr. Roadway Project Administrator:

The Roadway Project Administrator will be responsible for directing the inspection staff with respect to roadway related improvements. He and his staff will observe the contractor's work to determine the progress of the work, identify discrepancies, report significant discrepancies to the project team, and track observed discrepancies until resolution. He will also advise the project team of any significant omissions, substitutions, defects, deficiencies noted in the work of the Contractor, and any corrective actions taken. Assisting him in these roadway related duties is the Roadway Project Administrator.

### Sr. Bridge Project Engineer:

The Sr. Bridge Project Engineer will be responsible for directing the inspection staff with respect to bridge related improvements. He and his staff will observe the contractor's work to determine the progress of the work, identify discrepancies, report significant discrepancies to the project team, and track observed discrepancies until resolution. He will also advise the project team of any significant omissions, substitutions, defects, deficiencies noted in the work of the Contractor, and any corrective actions taken. Assisting him in these roadway related duties is the Bridge Project Administrator.

### Materials Project Administrator:

The Materials Project Administrator will be responsible for directing the materials testing staff and tracking all materials incorporated into the project. He and his staff will perform verification sampling and testing of component materials and completed work in accordance with the contract documents. He will also perform daily surveillance of the contractor's quality control activities as they relate to materials sampling and testing. He and his staff will also be responsible for the input of verification testing information and data into FDOT's LIMS database as appropriate.

### Office Manager:

The Office Manager will be responsible for directing the CEI team's support staff in the areas of scanning, filing, and resident compliance monitoring. The Office Manager and staff will be responsible for document control activities and general management of the administration staff. In addition she will be responsible for the team's efforts in relation to reviewing, monitoring, evaluating, and acting upon documentation required for construction contract compliance with EEO/DBE/OJT/Payroll requirements.

### Project Principals/Internal QA Review:

Company Principals will be responsible for conducting internal reviews to make certain the CEI organization is in compliance with the contract requirements. They will conduct these reviews to evaluate the adequacy of processes, documentation, procedures, and guidelines included in the contract. The results of these reviews will be recorded, any deficiencies noted, and corrective action documented.

## 2.2 CONSTRUCTION TEAM ORGANIZATION

DUSA's organization chart is presented in Appendix 11.4. The key personnel committed to work on this Project will fill the following roles:

### Project Manager:

The Project Manager is responsible for the overall planning, administration, and execution of the design-build project within the DUSA organization. He is accountable to I-595 EXPRESS LLC for the satisfaction of all the functional and technical requirements of the construction of the Project in conformance with the Contract. The Project Manager will meet regularly with I-595 EXPRESS LLC and the DUSA Executive Board to review progress and report on forecasted performance. All DUSA policies and procedures are issued at his direction. He is also responsible for staff development of his management team.

### Construction Quality Control Manager:

The Construction Quality Control Manager is DUSA's management representative responsible for developing, implementing, updating, and maintaining the Construction QMP. A detailed discussion of the Construction Quality Control Manager's responsibilities is included in the QMP.

### Construction Manager:

The Construction Manager is responsible for on-site production. He will manage and control job-site progress, documentation and the implementation of quality control. The Construction Manager will manage several General Managers and be responsible for mobilizing DUSA's workforce and subcontractors at the job-site, controlling daily production of bridges, right-of-way and roadway, maintaining and ensuring job-site safety, ensuring that QC testing and inspections take place, meeting all schedule milestones, and successfully closing out the Project. During the design phase, the Construction Manager will participate in design reviews.

As was described above, The Construction Manager will be in charge of the construction works to be performed during the contract; to accomplish this duty he will have a team composed by the Structures General Manager, the two Roadway General Managers, the Utility Manager, the MOT Manager, the Advanced Construction Manager and the ITS Civil Works Manager.

The Structures General Manager will report directly to the Construction Manager and will be in charge of all the structures to be constructed in the project. The Roadways General Managers will report directly to the Construction Manager and will be in charge of the roadway works to be performed in the project. We have identified two teams to perform the roadway works (Zone 1 to 6 and Zone 7 to 8b). Each roadway team will be composed of two or three Segment Managers in charge of Earthworks, Drainage, and Subcontractors and assisted by several Assistant Segment Managers. All will report to its respective Roadway General Manager (see attached Construction Organization Chart).The Utility Manager will report directly to the Construction Manager and will be in charge of the utilities works to be performed in the project.

The MOT Manager will report directly to the Construction Manager and will be in charge of the MOT for the entire project roadway corridor. He will have a team composed of MOT Supervisors and MOT Crews. Since 30% to 40% of the construction will occur at night there will be night shift Supervisor and crew as well.

The ITS Civil Works Manager will report directly to the Construction Manager and will be responsible for coordinating the ITS implementation and overseeing construction activities required to support ITS.

### Engineering Manager/Deputy Project Manager:

The Engineering Manager/Deputy Project Manager will report directly to the Project Manager. The Engineer Manager is responsible for both design development and technical support of DUSA's field production staff. The Engineer Manager is the technical liaison between design and construction and ensures that all required

design documentation is in place before construction efforts commence, or initiates the requirement for additional documentation to be prepared if required. To accomplish this duty he will have a team composed by the Engineering Project Manager, Engineering Support Project Manager, Purchasing Manager and Project Business Manager.

Engineering Support Project Manager:
The Engineering Support Project Manager will provide overall direction and management of the various groups responsible for cost/quantity control, contract administration, scheduling, survey and document control. The Survey Manager, Cost Engineer, Scheduler and Take off engineers will report to him.

Engineering Project Manager:
The Engineering Project Manager is responsible for communication of information, needs, and requests from the construction staff to the design staff, and vice versa. The Engineering Project Manager works with AE's Design Manager to ensure that design efforts are focused and tailored specifically to the construction needs in the field, identifies and resolves design scheduling conflicts, and works with the technical staff in the resolution of any field changes that may impact the design of the Project. Responsibilities also include monitoring and auditing the work of AE to ensure compliance with the Contract requirements, checking all design documents prior to submittal, and ensuring that they are on schedule. The Engineering Project Manager will be assisted by Eptisa, an Engineering Consulting firm that will provide constructability reviews, value engineering assessments, scheduling conflicts review, and MOT review and evaluation.

Project Business Manager:
The Project Business Manager will report to the Project Manager and Deputy Project Manager. The Purchasing Manager, the Account Manager and the Office Manager will report to both too.

The functions of other principal participants, which also appear in the organization chart, are presented below.

- The Environmental Permit Coordinator is responsible for ensuring that the I-595 EXPRESS Team complies with FDOT and other environmental regulations as specified in the Contract. The Environmental Coordinator will monitor all construction activities with respect to conformance with the design, permits, and previous commitments, report on non-compliance issues, and make recommendations for corrective action to protect natural resources located adjacent to the Project's construction.
- The Health and Safety Officer is responsible for the overall safety of the site, the I-595 EXPRESS Team and the public. In this role, the Health and Safety Officer will develop the project-wide Health and Safety Plan focused on minimizing injuries and illnesses among workers and third parties to the Project work site. The Health and Safety Officer will supervise a trained inspection staff that will be charged with implementing and enforcing the Safety Plan. Responsibilities will also include conducting mandatory safety training and preparing reports documenting the effectiveness of the Health and Safety Program and making modifications, as necessary to improve its effectiveness.
- The Cost Engineer is responsible for DUSA's cost and budget records and the establishment of the computer systems used to accept and track daily input of labor costs and periodic entry of general purchases, equipment costs, and subcontractor payments. The Cost Engineer will track the major work items by both dollars budgeted and percent completed and provide the Engineering Support Project Manager with frequent updates and weekly reviews of schedule and cost used to evaluate progress, make near-term allocations of personnel, equipment and other resources, and to forecast the timing and magnitude of future resource requirements.

- The Schedule Coordinator is responsible for the development and maintenance of a cost and resource loaded schedule to track work as it progresses. In this role, the scheduler will use critical-path scheduling principles based on the original schedule of values, applying cost and man-hours to each major work item and allocating them on the schedule timelines. The Schedule Coordinator will work closely with the Cost Engineer and report to the Engineering Support Project Manager on a daily basis relative to ongoing field activities to enable the accurate tracking and forecasting of construction activities as they proceed, as well as apportioning of time and resources in the most effective manner.
- The Document Comptroller is responsible for development of the document control processes and establish the infrastructure necessary to allow receipt, routing, sorting, saving and retrieval of all hard copy and electronic data from every functional group within DUSA using an Internet-enabled system for security as well as speed and ease of access.
- The Utility Coordinator will meet regularly with utility companies and municipal utility officials and serve as a liaison between these entities, I-595 EXPRESS LLC design and construction personnel and FDOT. He/she will coordinate the activities of the utilities and I-595 EXPRESS LLC designers, and is responsible for anticipating potential issues that may affect the Project schedule and quality, and plan contingency actions to avoid or minimize their impacts. The Utility Coordinator will have authority to facilitate the resolution of those issues.

## 2.3 DESIGN TEAM ORGANIZATION

AE's organization chart is presented in Appendix 11.5. The following key design roles will be filled on this Project:

### AE Project Manager:

The AE Project Manager will be responsible for the overall management conduct of the design team. In particular, the Project Manager will provide primary responsibility for the administration of the design contract including project management, invoicing, and subcontracting and strong oversight the Project Services including design schedule and QA/QC performance. This will enable the Design Manager to fully focus on design specific activities on this complex project. The Project Manager will also be responsible for working with the Design Manager and Lead Engineer to identify and allocate the resources necessary for the design team to achieve quality work, on time, and within budget. The Project Manager reports to the DUSA Engineering Manager.

### Design Manager:

The Design Manager assures that the specifications, standards, design criteria, and other technical requirements established within the Contract are followed. He is also responsible for creating the definition of each design package, including scope, schedule and deliverables. The Design Manager will coordinate work of all packages to meet the total Project design requirements, approve all design deliverables prior to releasing them for construction in accordance with the Design Quality Management Plan (DQMP), and develop technological innovations for the design of the Project. The Design Manager reports to the AE Project Manager and has a direct liaison with the DUSA Design Coordinator.

### Design Quality Manager:

The Design Quality Manager is responsible for ensuring that all design is performed in accordance with the DQMP. He will perform various audits to assess the completeness of all Design Quality Control Reviews and issue

Certificates of Conformance. He has the authority to stop any and all design work that does not meet the standards, specifications, or criteria established for the Project. In addition, the Design Quality Manager will provide any necessary updates and revisions to the DQMP, provide quality training, and maintain all necessary quality documentation.

Lead Engineer:
The Lead Engineer is responsible for understanding the Project's technical requirements and providing overall technicaloversight assistance to the Design Manager for the roads and bridge aspects of design. The Lead Engineer will assist the Design Manager in the establishment of the design scope and the monitoring of progress as it relates to the deliverable requirements. He is primarily responsible for assisting with specific roadway and bridge design issues as it relates to the technical requirements.

The functions of other principal participants, which also appear in the organization chart, are presented below:

- The Utility Coordination Lead will meet regularly with utility companies and municipal utility officials and serve as a liaison. Responsibilities include coordinating with the Construction Coordinator and utility entities.
- The Design Discipline Leads (Roadway, Structures and Interdisciplinary) report directly to the Design Manager and are responsible for providing technical direction to the production staff of their respective discipline. They will provide leadership and management of the production staff and are responsible for the direction and success of the group(s) providing design services. The Design Discipline Leads are also responsible for understanding the integrated nature of the design process and will assess the effect of their discipline's design on the Project as a whole and communicate and coordinate any required modifications or revisions.
    - Given the size of the Project and resources required, the design team organization reflects not only a structure based on technical discipline, but also a structure that breaks the Project into manageable sizes through the definition of specific zones as outlined in Section 3 These nine zones (1 through 7, 8a & 8b) are described in Section 4.
    - This segregation provides individual sub-teams to focus on a finite portion of the Project within logical limits, allowing a number of design activities to run in parallel and minimize schedule durations. Coordination of the designs between zones will be seamless through oversight provided by the Discipline Leads and frequent coordination meetings, among other strategies explained elsewhere in this PMP.

Other professional engineering firms assisting AE in the design of the Project include the following:

- MACTEC Engineering and Consulting, Inc. is a leading engineering infrastructure, construction management, geotechnical engineering design, and environmental, consulting services firm and has been providing geotechnical and materials testing services to the FDOT and Florida's Turnpike Enterprise for more than 20 years. MACTEC will be providing geotechnical design, drilling and testing for design and testing and field inspection for structures and roadway during construction.
- Greenhorne & O'Mara, Inc. (G&O), founded in 1950, has a large and diversified staff of over 650 professionals with extensive expertise in civil, structural, environmental, transportation, and water resources engineering; surveying and mapping; environmental services, including hazardous materials assessments; landscape architecture; and other related disciplines. For more than 20 years G&O has

been providing design, drainage, survey and right-of-way services for FDOT District 4. G&O will be providing roadway design, survey, and subsurface utility exploration.

- Kimley-Horn and Associates, Inc. (Kimley-Horn) was founded 41 years ago as a traffic and transportation firm, has grown to a full-service engineering consulting firm that offers a range of services including roadway design, drainage design, bridge design, landscape architecture, and environmental science. Kimley-Horn has nearly 700 professional and support staff in Florida in 21 offices statewide. Kimley-Horn will be providing bridge, roadway, and lighting design.
- F.R. Aleman & Associates, Inc. (FRA) has been providing FDOT and municipalities throughout Florida with professional services for design and analysis of ITS systems, systems management, traffic engineering studies, signal timing, construction engineering inspection, surveying, and subsurface utility engineering for more than 20 years. FRA is comprised of approximately 100 professionals located in five offices throughout the Florida. FRA will be providing traffic information for signals and MOT and ITS infrastructure, lighting design and subsurface utility exploration.
- C3TS, P.A. is a full-service, multi-disciplined architectural, engineering, planning and public relations firm with headquarters in Coral Gables, Florida. C3TS has more than 135-employees located in South and Central Florida and has been providing engineering services on FDOT related projects throughout Florida (All Districts) since its inception. C3TS will be providing bridge, utility, and pavement design.
- Curtis + Rogers Design Studio Inc., founded in 1991, provides landscape architectural design and construction phase services throughout south Florida for public and private clients, including extensive work in the transportation sector for FDOT, Florida's Turnpike, MDX, MIA, and Miami-Dade County. Curtis + Rogers will provide landscaping and aesthetics design on this project.
- R. J. Behar & Company, Inc. (RJ Behar) has been providing engineering, planning, and construction management engineering inspection to public and private clients throughout Florida since 1999. RJ Behar is a minority owned firm and is DBE certified by FDOT. RJ Behar will be providing drainage design and traffic signal design.
- Beiswenger, Hoch and Associates, Inc. (BHA), firm with 50 year history, has been providing variety of engineering services for transportation and infrastructure projects including abroad, and is recognized for their capabilities in the planning and design of roadways and bridges. BHA will be providing roadway, structural and drainage design.
- Cyriacks Environmental Consultant Services, Inc. (CECOS), is an environmental firm providing variety on environmental services, including permitting. CECOS will be providing support for environmental permitting services.
- Bolton Perez & Associates (Bolton Perez), has been providing engineering services for FDOT and municipalities in south Florida. Bolton Perez will be supplementing AECOM structural and roadway teams.
- HBC Engineering (HBC) is an ambitious engineering firm providing transportation engineering services. HBC will provide engineering managements services.

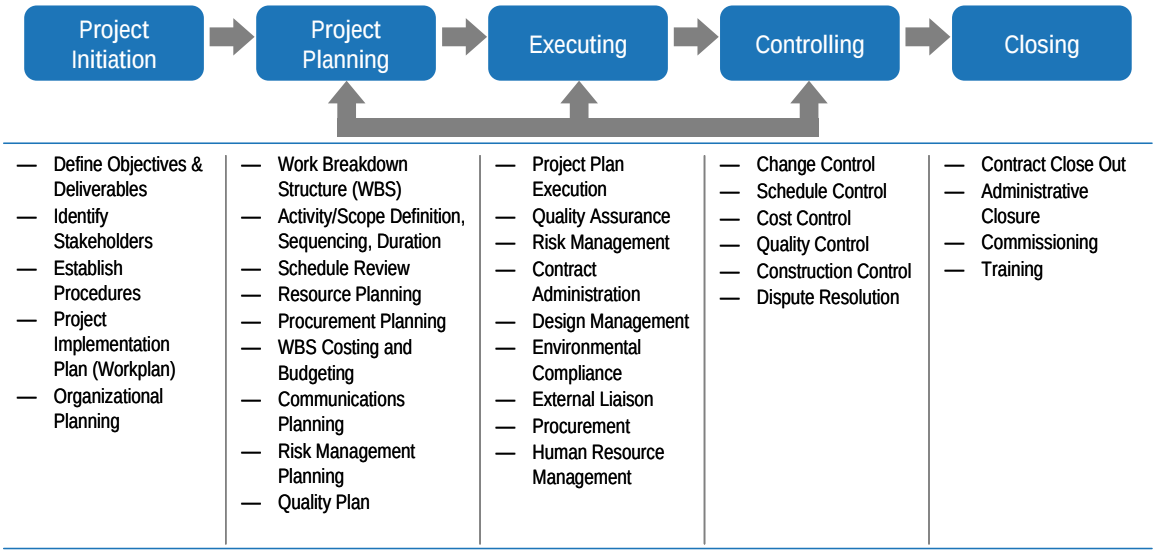
# 3 Design Management Concept

Successful management of the design elements of the Project begins with the establishment of the most suitable organizational structure for efficient and economical delivery of the work. The design team specifically engaged for this Project is experienced in large-scale projects delivered using design-build methodologies. Qualified personnel are the foundation upon which the design management concept is built.

## 3.1 DESIGN MANAGEMENT

AE's support of the overall PMP will include planning, executing, and controlling the Project's design activities to meet Contract requirements. The framework of the design management process is shown in Figure 2.1

*Figure 2.1 – Design Management Process*



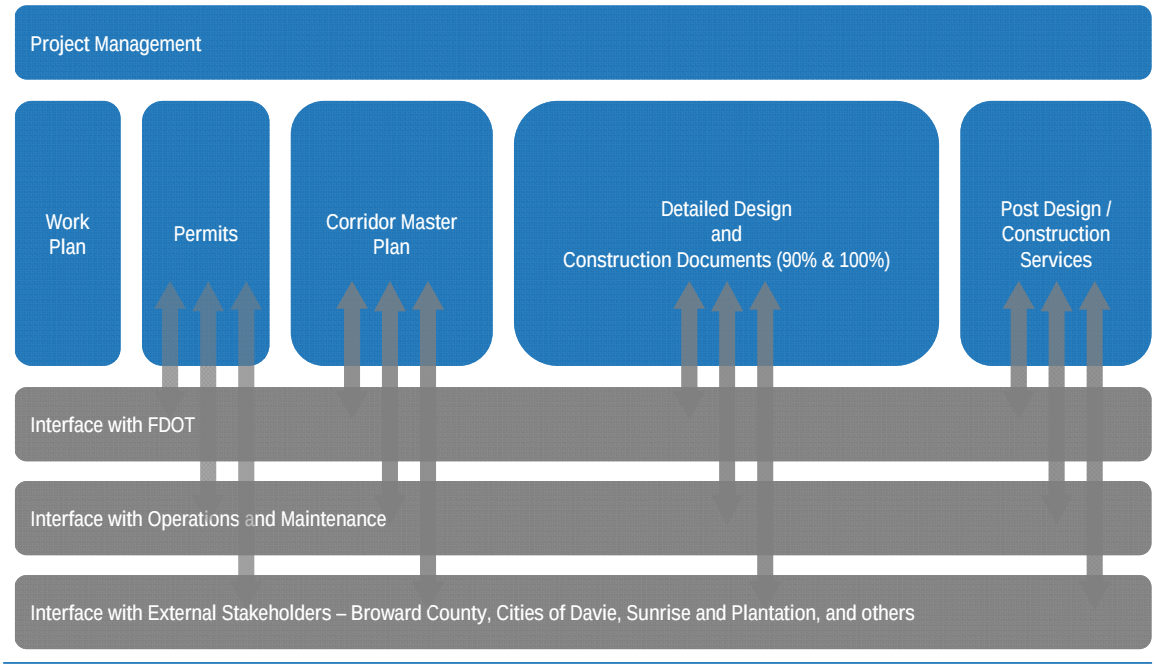

The design processes and supporting systems and procedures are intended to provide effective management and coordination of the Project's design team and provide essential coordination with other I-595 EXPRESS Team members including DUSA and I-595 EXPRESS LLC's O&M staff.

Furthermore, AE is committed to working within contractual milestone dates. AE recognizes that to achieve this objective, AE must adhere to a comprehensive work plan and schedule. AE will take a proactive approach to minimize deviations from its work and will continually endeavor to limit the impact of any unforeseen changes on the construction efforts performed by DUSA.

To achieve this, AE will develop a Project Work Plan which is located in Appendix 11.6 that outlines its approach to effectively deliver the design for the Project. Inputs/outputs to each phase, milestone and key decision points will be identified to develop a complete understanding of the work elements and their inter-relationships. This Project Work Plan will be detailed and tied to the Work Breakdown Structure (WBS), schedule, and cost. In addition, the Project Work Plan forms the basis of the communication plan to ensure that all I-595 EXPRESS Team members are clear on the design objectives and work processes at the outset.

The framework of the Project Work Plan Flow is illustrated in Figure 2.2 identifying key tasks within each work plan phase and grouped by major components.

*Figure 1.1-3 Project Work Plan Flow*




In general, the design sequencing and construction package submittals follow the sequencing of construction shown in Section 4.2.

More detailed description of overall design project management and design package submittals can be found in the Project Work Plan, including a detailed breakdown of component design packages and related Exhibits.

As stated above, breakdown of the design and construction activities and actual timing and sequencing of component packages and submittals can be found in the Project Schedule (Appendix 11.11).

## 3.2 DESIGN INTERFACE WITH QA/QC

Relative to quality, AE has developed a formal Design Quality Management Plan (DQMP) as a subset of the overall Quality Management System (QMS) for the Project and provides interfaces with the entire I-595 EXPRESS LLC Team. The DQMP describes the design team's strategic plan for accomplishing its goals and objectives and will be use as a formal communication piece to clarify processes, procedures, interfaces, and accountability.

DUSA has reviewed the DQMP and provided input, concurrence, and gained familiarity with the design process. This formed the basis of understanding throughout the organization of the design team's responsibilities and expectations and helped achieve the PMP's previously stated objectives relative to quality and coordination.

Within the DQMP, specific QA/QC interface points between design personnel and the construction and O&M organizations are detailed. This includes a number of reviews performed by senior project staff at designated stages of the Project to address constructability, integration, compatibility, legibility of the plans, the effectiveness of communication between the engineering and other I-595 EXPRESS Team members that are recipients of the design, and a host of other quality issues related to the built facility. The purpose of these meetings is to enhance and expedite the design process by ensuring that communication between design and build partners is frequent and focused.

More information regarding the DQMP and the I-595 EXPRESS Team's Quality Management Systems please refer to the QMS.

## 3.3 DESIGN INTERFACE WITH THE CONSTRUCTION AND O&M ORGANIZATIONS

Developing a DQMP that is integrated with the associative construction and O&M plans is only one example of interface between the design, build, and O&M functions. Another example is the collaborative approach between the designers work and other members of the I-595 EXPRESS Team to define those factors that will influence the Project's design. These included aspects such as:

- Worker and public safety
- Maintenance of traffic
- Construction access
- Construction staging
- Available construction resources
- Available construction materials
- Material selection for maintainability
- Targeted access or completion for operation phase

This type of collaboration will continue throughout final design during regularly scheduled coordination meetings that serve as the organizational and technical interface between the parties involved in the design and construction process. Design progress and specific construction related issues will be addressed and documented in formal meeting minutes and action items will be created and tracked for each issue needing further analysis, discussion and resolution. The direct benefit of this interface will include the following:

- Constructability and safety is incorporated into designs. The construction team has been and will continue to work with the design team to ensure that a well-conceived construction methodology is included in the design.
- A design that will be in strict compliance with the Contract. The design is not simply a product of applicable codes, but a product that takes into account the builder's knowledge of material specifications and the operator's knowledge of the facility's performance.
- A design schedule that enables early construction starts. The design team has a fully integrated phased design schedule that complements the construction phasing and completion schedule.
- Provide Innovation. A collaborative approach that has already resulted in a number of Alternative Technical Concepts (ATC) being developed during proposal preparation and conditionally accepted by FDOT.
- Integrated and staged traffic flow analysis to ensure minimum impact from construction.
- Fewer post-design field changes. Constructability issues addressed during the design will reduce or eliminate the need for changes after construction begins.

- Reduced future maintenance. The design team, with I-595 EXPRESS LLC's O&M specialists, will consider and incorporate their vast O&M experience and concerns into the design to reduce long-term O&M costs.
- Value engineering enhancements in design. Interaction between designers and construction professionals, all dedicated to improving the value and utility of the Project, provides a constant value engineering process.

# 4 Construction Management Concept and Interface with QA/QC Organization

The overall construction management concept and philosophy is based on three primary elements: partnering, trust, and communication. Foremost, there is a need to foster a cooperative teamwork attitude that encompasses the entire I-595 EXPRESS Team including designers, builders, subcontractors, O&M personnel, FDOT, and all major stakeholders. This approach encourages and facilitates clear and open communication that is essential to any major undertaking. It also helps by reaching a large and diverse audience at one time, so that multiple viewpoints and concerns can be discussed early and openly. Construction Communication Protocols have been developed for this project and are located in Appendix 11.7.

## 4.1 COORDINATION PLAN

### Internal Coordination

Internal coordination is a key element to executing a successful construction plan. Effective planning and scheduling of our work is the main component of our internal coordination efforts that we implement on all construction projects. DUSA supervisors recognize the need to be actively involved in the work to ensure that all project requirements are met. To ensure this active involvement, DUSA and subcontractors supervisors are required to develop Operation Work Plans for their construction activities. These work plans become a construction management tool which would include safety hazard analysis, detailed sequence of events, access considerations, material handling, equipment and manpower requirements, specifications, quality control and testing requirements, shop drawing and submittal requirements, and other pertinent information. In addition, DUSA provides added levels of project support and oversight through the active involvement of an off-site project manager and quarterly executive reviews by upper management.

During the life of the project, regular internal coordination meetings will be scheduled to involve all key project personnel. Some of these meetings include: pre-planning/brainstorming meetings; operation planning meetings; weekly and monthly scheduling meetings; weekly and monthly safety meetings; weekly cost meetings and monthly operations review meetings.

### External Coordination

External coordination is essential to the overall success of a project. Effective communication and coordination is paramount to keep all parties aligned and meet the challenges that can arise over the course of a project. DUSA will maintain excellent owner relations and will be proactive in issue resolution. In addition to our strong commitment to Partnering, the following is a list of other external coordination techniques that DUSA anticipates implementing on this project:

>Maintain direct line of communication between DUSA project managers the Concessionaire and the FDOT management team

>Propose weekly progress meetings with the I-595 EXPRESS LLC, FDOT and CEI teams to review upcoming activities and track the progress of work

>Provide three-week look-ahead schedules (updated and submitted weekly) to coordinate all construction activities

>Have Partnering Meetings at the beginning of the project and a follow up meeting within one year from the initial one. Subsequent meetings will be coordinated accordingly.

>Work closely with FDOT and/or Public Information Consultant to disseminate accurate and updated press releases and construction information

>Initiate and maintain close communication with existing utilities to coordinate activities in a timely manner

>Coordinate with local governmental and environmental agencies to ensure compliance

## 4.2 CONSTRUCTION TEAMS /MANAGEMENT APPROACH

The Project Manager supported by the Construction Manager, the Engineering Manager/Deputy Project Manager, the Project Business Manager and Human Resources, will safely provide quality technical solutions and experienced personnel, while working jointly with FDOT and other stakeholders. Success will be measured by meeting or exceeding FDOT's expectations, such as quality, reduced impact to the travelling public and open communications.

The Construction Organization will be lead by the Construction Manager managing all construction zones and activities. The Construction Manager will be supported by one Structures General Manager, two Roadway General Managers (responsible for two (2) or three (3) segments managers) also one (1) utility manager, one (1) MOT manager and one (1) ITS Civil Works Manager as indicated in the DUSA Organizational Chart.

The construction management plan will focus on the same "no surprises" approach used for all DUSA projects by implementing the following Major Construction Management Elements:

Project Start-Up: Our team will start the planning process weeks before the actual work start.

MOT and Safety Management: Prior to starting work, we will establish a job-specific Safety Manual which will contain a complete list of safety procedures.

Construction Sequencing and Equipment Operations: Each discipline foreman and subcontractors will have a detailed schedule of their work. From the baseline schedule, we will develop a detailed day-to-day schedule to expedite more efficient equipment and materials management.

Progress Schedules: Each week a detailed "three-week schedule" will be completed and compared to the baseline schedule. A copy of this look-ahead schedule will also be provided to the QC Manager who will submit this to the Concessionaire Quality Manager for his information and coordination.

Daily Quality Control Documentation: In accordance with Construction Quality Control (CQC) requirements, the DUSA/AE Team will include Quality Control personnel. The QC Manager will use the Department's Standard forms to summarize the daily QC program activities including testing and material sampling activities. The QC Manager will make available to the Department's representative copies of all completed forms for review. The QC Manager will also ensure that all QC tests are entered into the Department's database on a daily basis and all QC forms delivered to the Project Administrator within 24 hours after completion of the work.

Project Status Meeting: The Project Manager will attend as requested to progress meetings with the Concesionaire and FDOT representatives and upper management to review safety, quality, plans, schedules,

field issues and any other issues of concern. There will be coordination meeting at different levels of operations as follows: Weekly coordination meetings between the Construction Manager and the Structures, Roadway, Utilities and MOT general managers. Daily coordination meeting will be conducted between Segment managers and foremen including subcontractors. Upper management level coordination meetings are anticipated every quarter.

As-Builts: Our Technical Department will be responsible for the regular updating and maintenance of as-built conditions for incorporation into the permanent drawing record. QC oversight will ensure that the as-built drawings will include accurate information including any field changes.

Construction Closeout: In addition to performing a plan to start each operation, we will develop a plan for closeout of the contract. This plan will include the close out of permits, shop drawings, as-builts, completion of the punch list, equipment checkout and developing a plan for handling any warranty issues that might arise.

### Optimal Allocation of Construction Resources

Another distinct attribute of the construction management approach is to be flexible and innovative enough to apply resources as required to complete the Project within a tight schedule. Organizational flexibility will allow support resources to be applied to job elements on the critical path, and hence keep the Project on schedule. Part of this flexibility will be to maintain the ability, if need be, to self-perform essentially any of the work on the Project; from earthworks, to pipe laying, to paving, to structures. This provides the assurance that DUSA not only maintains competitive pricing from subcontractors, but that I-595 EXPRESS LLC can make a stronger commitment to achieve the Interim Milestones Deadlines.

The work has been divided in nine construction zones. In accordance to the Construction Schedule six (6) construction teams have been foreseen to be required to complete the project. As is indicated in Figure 4.1 below. The following is the allocation of the six teams within the construction zones:

Roadway Construction Team 1: From Zone 1 to Zone 6

Roadway Construction Team 2: Zone 7, Zone 8a and Zone 8b

Structures Construction Team 3: Structures

MOT Construction Team 4: MOT

Utilities Construction Team 5: Utility Work

ITS Construction Team 6: ITS Civil Work

The following diagram illustrates the construction management structure to reflect the nine zones (segmentations) of the project:

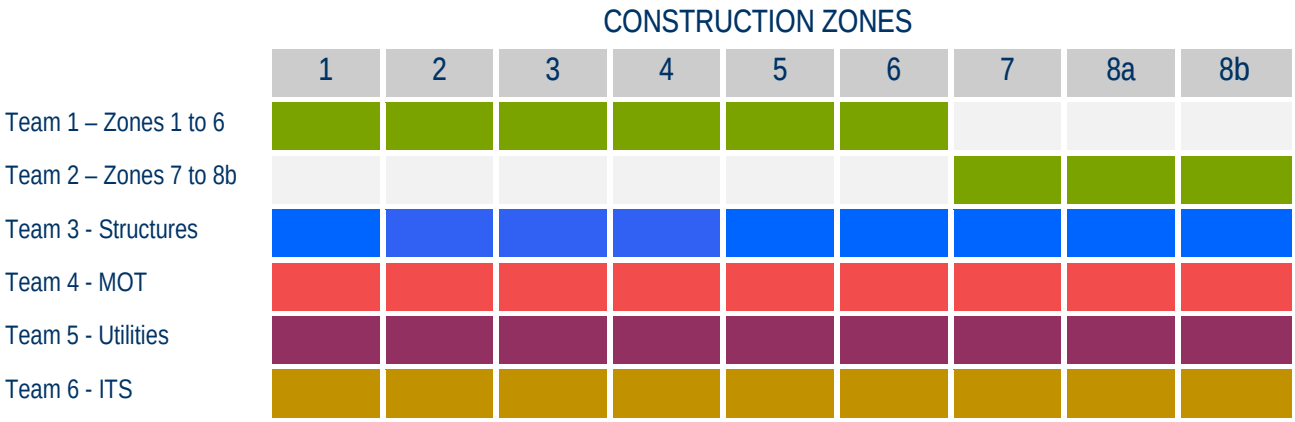



*Figure 4.1 – Construction Management Structure by Zones*

## 4.3 CONSTRUCTION MANAGEMENT STRUCTURE

Another critical aspect of DUSA's construction management approach is to organize and operate as zones level organization. For purposes of organizing the work, the Project is divided into nine independent geographic zones under a unique organization structure. Zones Managers and trade Managers (refer to graphic above) will report to the Construction Manager as depicted in the Construction Organization chart Appendix 11.4.

### 4.3.1 Advance Construction Activities

DUSA will focus on the following Advance Construction Activities (ACA) as allowed by the Contract Documents:

1. Construction of the Greenway along the north side of the NNRC from 136th Ave to University Dr. and portions on the south side of the NNRC from Davie Road east to the end of the project.
2. Construction of 22 feet Ground Mounted Sound Walls located on the North side of the NNRC and on the Florida Turnpike NB and SB north of I-595.
3. Utilities Relocation: Approximately 5,300 LF of a 2" GM to Old Plantation Water Control District between Pine Island and Nob Hill will be relocated as part of ACA.

To achieve this goal the following steps will be implemented:

Proactive Design: Close design coordination will take place between AE, DUSA, I595 Express LLC and the Department by implementing early packages review meetings and design workshops to detect, resolve and advance on any potential problems that may affect the ACA design process.

This process has been implemented and all the parties involved have been working close together to achieve results. An Authorization Letter to start the advance construction activities was issued on June 12, 2009.

Permits: Initial permitting coordination meetings will be held with the different agencies to learn about their concerns and requirements and at the same time set the basis for their involvement in the process.

All regulatory permits have been issued for the Greenway operation as follows:

- SFWMD Environmental Resource Permit Standard General Permit No. 06-05659-P. Issued on May 21, 2009
- SFWMD Right of Way (ROW) General Permit No. MOD 13397 (Greenway). Issued June 16, 2009
- SFWMD Right of Way (ROW) General Permit No. MOD 13383 (SB-3 – Hawks Landing Sound Wall). Issued June 16, 2009
- FDEP Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities. Permit effective on June 12, 2009

Public Involvement: With the Department's input and as part of the coordination process public meetings will take place to inform the public of upcoming events and to mitigate any concerns or conflicts that may arise from the new construction.

WEST GREENWAY – 136th Ave to University Drive

The Advance Construction Activities have begun with the West Greenway construction activities on Monday, June 15, 2009. The limits of this portion of the project are between 136th Ave and University Drive. The construction started at 136th Ave and will continue west.

The following activities are currently taking place:

1. Silt Fence Installation
2. Clearing and Grubbing
3. Sub-grade excavation
4. Lime-rock Base installation
5. Sidewalk Concrete path placement

It is anticipated to start construction of four bridges along the pathway in the Greenway. Sound walls are also part of advance construction activities which are estimated to begin construction in August this year with SB3 (Hawks Landing) located on the north side of the NNRC canal between Hiatus and Nob Hill.

### 4.3.2 Construction Zones

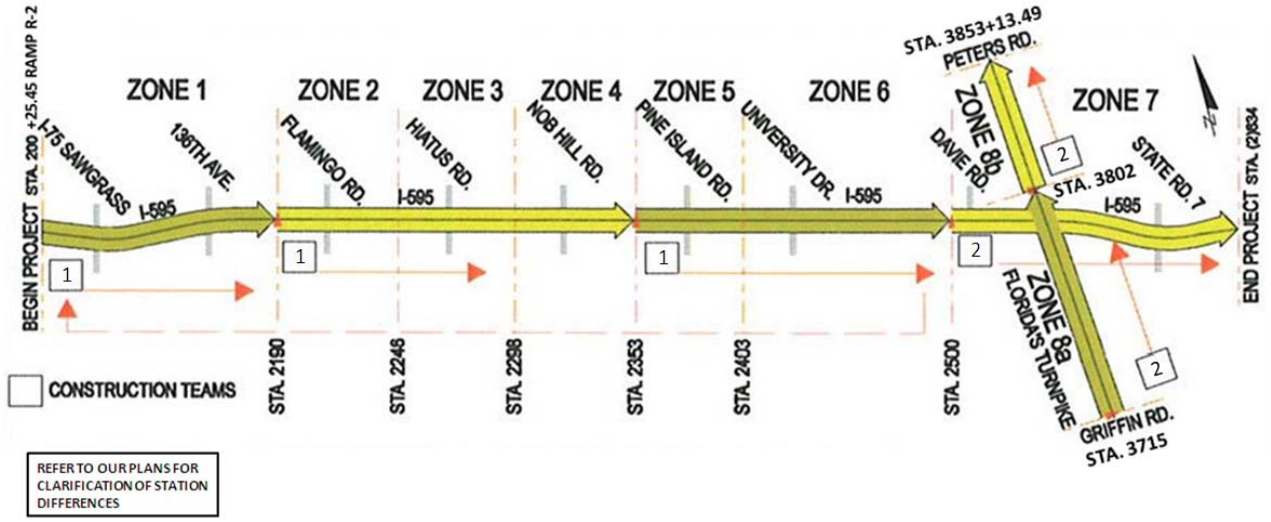
The construction zones are numbered beginning at Zone 1 located on the west end of the Project and progresses to Zone 7 terminating at the viaduct on the east end of the Project. Zones 8a and 8b are defined as the Turnpike (Griffin Road to Peters Road) broken up into two separate zones 8a and 8b. Each zone is generally one-mile in length, with the exception of Zones 1, 7 and 8.

The specific limits of the zones are defined as follows:

| Zone | Description | Zone | Description |
|---|---|---|---|
| 1 | Sta. 200 (West end of the Project - Saw grass/I-75) to Sta. 2190, East of 136th Ave. | 5 | Sta. 2353 to Sta. 2403, East of Pine Island |
| 2 | Sta. 2190 to Sta. 2246, East of Flamingo Road | 6 | Sta. 2403 to Sta. 2500, East of University to Davie Road |
| 3 | Sta. 2246 to Sta. 2298, East of Hiatus Road | 7 | Sta. 2500 to Sta. 2634, Viaduct, East end of the Project |
| 4 | Sta. 2298 to Sta. 2353, East of Nob Hill Road | 8a<br>8b | NB and SB Turnpike from Griffin Road (South) to Peters Road (North) |

There are two main roadway construction teams for nine construction zones which are broken down into MOT phases, where each construction zone having three (3) or four (4) MOT phases of construction with several steps within each phase. The phases have also been established to allow construction activities to occur concurrently in each active zone with adjoining zones starting at different times. Night work is planned to mitigate traffic delays and public access issues to cross roads. Each phase of construction within a zone represents a traffic shift to accommodate construction activities. Further daily “adjustments” to traffic may be required depending on the specific location of the work, such as new storm drains or existing utility tie-in requirements. Figure 4.2 represents the overall construction phasing/sequencing relative to Zone vs. Phase construction to achieve contractual milestones.

*Figure 3.2 – Work Zones*




Construction will start in three different zones (Zones 5, 7 & 2) almost simultaneously. Each Zone is further divided into generally up to four MOT phases of work (from the outside to inside). The remaining zones will start as soon as the design completion permits or per the attached Project Schedule, Appendix 11.11, at the latest. The Greenway is scheduled ahead of all work on a continuous manner, so it is estimated to be completed early in the project. Utility relocation, bulkhead and sound walls are also priorities. Contract Milestones are shown in Figure 3.3 below, the Project Schedule attached shows sequence of construction events to accomplish milestones and the Project Schedule includes the narrative regarding schedule approach as to how the work is planned.

*Figure 3.3 – Contract Milestones*

| | | | | | July 15, 2009 |
|---|---|---|---|---|---|
| **FDOT Milestones** | **IMS** | **"Effective Date"** | **Interim Milestone Calendar Days from Effective Date** | **Interim Milestone Date Requirement** | **CD from Today** |
| Sound Barrier Group A - includes ground mounted sound barriers generally parallel to Florida's Turnpike and north of I-595 and groun-mounted sound barriers north of westbound SR-84 and completion of and acceptance of the Broward County Greenway. | 1 | 3/3/2009 | 940 | 9/29/2011 | 806 |
| Ramp T-16 - opening of all lanes of Ramp T-16 for continuous operational service for traffic to northbound Florida's Turnpike ("Interim Milestone Works 2") | 2 | 3/3/2009 | 940 | 9/29/2011 | 806 |
| WB Braid - opening for permanent operations, including full capacity, of the wesbound braid, including Ramps L-1 and L-2 and westbound SR-84 from Pine Island Road to Nob Hill Road ("Interim Milestone Works 3"). | 3 | 3/3/2009 | 940 | 9/29/2011 | 806 |
| EB By-pass/braid - opening for permanent operations, including full capacity, of the eastbound braid/by-pass, including Ramps K-1, K-2, M and O ("Interim Milestone Works 4") | 4 | 3/3/2009 | 940 | 9/29/2011 | 806 |
| Sound Barriers Group B - includes ground mounted sound barriers generally parallel to Florida's Turnpike and south of I-595 and ground mounted sound barriers south of eastbound SR-84 ("Interim Milestone Works 5"). | 5 | 3/3/2009 | 1395 | 12/27/2012 | 1261 |
| SR-84 EB - opening for permanent operations, including full capacity of continuous SR-84 eastbound, from Sewell Lock to eastern limits of the Project ("Interim Milestone Works 6"). | 6 | 3/3/2009 | 1395 | 12/27/2012 | 1261 |
| SR-84 WB - opening for permanent, including full capacity, of continuous SR-84 westbound, including complete connections to Ramp T-16, from Sewell Lock to the eastern limits of the Project ("Interim Milestone Works 7") | 7 | 3/3/2009 | 1395 | 12/27/2012 | 1261 |

| | | | | | |
|---|---|---|---|---|---|
| Express Lanes (I-595) - opening for permanent operations, including full capacity, of the Express Lanes, including revenue collection, with or without access to Florida's Turnpike ("Interim Milestone Works 8"). | 8 | 3/3/2009 | 1850 | 3/27/2014 | 1716 |
| Substantial Completion | 9 | 3/3/2009 | 1850 | 3/27/2014 | 1716 |
| **Final Acceptance** | **10** | **3/3/2009** | **1940** | **6/25/2014** | 1806 |

### 4.3.3 Summary of Construction Zones and Phases

The following describes a summary of the work included in each of the construction zones and phases.

#### 4.3.3.1 Zone 1 – Station 200 (West end of the Project - Sawgrass/I-75) to Station 2190, East of 136th Avenue (Roadway Construction Team 1)

Greenway

Construct the greenway on north side of NNRC to SW 125th Avenue including two new Bridges 000205 and 000207 with rehabilitation to existing Bridge 000206 to Station 2246

Roadway
Phase 1

- √ Construct WB I-595 on the south side and EB I-595 on the north side
- √ Construct ramps R-1, R-2, R-3 and R-4
- √ Complete the Express Lanes to 2160 with new structure 000101 and 860384 construction
- √ Construct Commodore Rd. and 136th St. canal bridge upgrades as required, with temporary signals and permanent drainage
- √ Construct temporary pavement for EB and WB SR-84 (2165 to 2190)
- √ Construct EB SR-84 South side construction and WB SR-84 North side construction

Phase 2

- √ Construct WB I-595 on the north side and WB SR-84 on the south side; construct EB SR84 on the north side and EB I-595 on the south side
- √ Construct WB north side widening for bridge 860383 and EB south side widening for bridge 860384
- √ Complete Sawgrass ramp connections; ramps A, B, and D

Phase 3

- √ Complete Express Lanes from Station 2160 to 2190. WB I-595 and WB SR-84 existing ramp is closed and rehabilitated\

#### 4.3.3.2 Zone 2 – Station 2190 to 2246, East of Flamingo Road (Roadway Construction Team 1)

Greenway

- √ Construct the greenway from Commodore Rd. to (finger canal bridges 000206 and 000207) Flamingo Rd., prior to starting phase 2 WB SR-84, then to Hiatus Rd. including the new finger canal bridge 000201 before starting Zone 2, phase 1
- √ Continue greenway construction through to Nob Hill, constructing bridge 000202

Roadway

*Phase 1*

- √ Construct temporary pavement for both EB and WB SR-84
- √ Construct WB SR-84, north side; construct EB SR-84 south side
- √ Complete SW 125th St. and Flamingo Rd. connection. Install temporary signals
- √ Construct express lanes with existing bridge construction (2208 to 2224) – use as traffic diversion
- √ Construct the express lanes to final grade from 2190 to 2208 and 2224 to 2246 – use as traffic diversion

*Phase 2*

- √ Construct WB I-595, north side and WB SR-84, south side; construct EB I-595, south side and EB SR-84, north side
- √ Construct ramps C, D, E-1, E-2, F, and G

*Phase 3*

- √ Remove temporary median pavement
- √ Construct express lanes to final grade with remaining services (2208 to 2224)

#### 4.3.3.3 Zone 3 – Station 2246 to 2298, East of Hiatus Road (Roadway Construction Team 1)

Greenway

- √ Construct Pine Island Rd. new greenway structure
- √ Continue the greenway construction from Hiatus Rd. to Nob Hill Rd. (Zone 4) with connection to Nob Hill Rd. prior to starting Phase 2 works. Continued work through Pine Island Rd. with new finger canal bridges 000202 and 000203, prior to Zone 3 phase 2 passing Nob Hill Rd

Roadway

*Phase 1*

- √ Construct WB SR-84 temporary pavement

- √ Construct WB SR-84, north side and EB SR-84, south side
- √ Install temporary signals
- √ Complete Hiatus Rd. canal bridge upgrades and local cross street improvements

*Phase 2*

- √ Construct WB I-595, north side and WB SR-84, south side; construct EB I-595, south side and EB SR-84, north side
- √ Construct temporary EB SR-84 to EB I-595 ramp east of 000107 prior to closing ramp at 2287
- √ Construct ramp I and J; complete ramps E-1, E-2, G and H – bridges 000105, 000106 and 000107

*Phase 3*

- √ Close both existing ramps (2247 and 2292)
- √ Construct the express lanes with bridges 860370 and 860371 interior construction

#### 4.3.3.4 Zone 4 – Station 2298 to 2353, East of Nob Hill Road (Roadway Construction Team 1)

Greenway

- √ Greenway is constructed to Nob Hill Road, continue bridge connection to Pine Island Road prior to starting Zone 3, phase 3 works. Greenway bridges 000202 and 000203 over the finger canals to Pine Island Road are now constructed

Roadway

*Phase 1*

- √ Construct WB SR-84 and EB SR-84 temporary pavement (2310 to 2330)
- √ Construct WB SR-84, north side and EB SR-84, south side
- √ Construct express lanes (2298 to 2323) – used as traffic diversion
- √ Construct express lanes, no permanent barriers – used as traffic diversion (2323 to 2353)
- √ Construct south side local cross street improvements and temporary signal installation at Nob Hill Rd.

*Phase 2*

- √ Construct WB I-595, north side and WB SR-84, south side; construct L-1 and L-2 and complete ramp J, ramp 9 remains open until end of phase
- √ Construct EB I-595, south side and EB SR-84, north side; complete ramps K-1, K-2, and M

*Phase 3*

- √ EB and WB I-595 final regarding and surfacing as required
- √ Construct express lanes to final grade and barriers (2323 to 2353)

#### 4.3.3.5 Zone 5 – Station 2353 to 2403, East of Pine Island Road (Roadway Construction Team 1)

Greenway

- √ Greenway is constructed to University Drive with connections made to Broward County's greenway network

Roadway

*Phase 1*

- √ Construct L-1 structure (000112) and Pine Island Road canal bridge upgrades as required
- √ Install temporary signals at Pine Island Rd. and complete local cross street improvements
- √ Construct WB SR-84 and EB SR-84 temporary pavement (2358 to 2391)
- √ Construct WB SR-84, north side and EB SR-84, south side
- √ Construct temporary pavement in the express lanes (2353 to 2395) – used as traffic diversion
- √ Construct express lanes bridge 000114 and widen 860358 to north – used as traffic diversion
- √ Construct express lanes (2395 to 2403) – used as traffic diversion

*Phase 2*

- √ Construct WB I-595, north side and WB SR-84, south side; construct L-1
- √ Construct WB I-595 and ramp L-1 structure 000113 (Demo bridge 860357)
- √ Construct EB I-595, south side and EB SR-84, north side
- √ Construct ramps K-2, M and bridge 000115

*Phase 3*

- √ Remove the temporary pavement placed in phase 1 and complete the express lanes construction (2353 to 2395)
- √ Construct final barrier wall tie to express lane bridge

#### 4.3.3.6 Zone 6 – Station 2403 to 2500, Pine Island Road to University Drive, to West of Davie Road (Roadway Construction Team 1)

Greenway

- √ Broward County greenway is constructed to University Dr.

Roadway

*Phase 1*

- √ Construct WB SR-84 temporary pavement (2436 to 2448)
- √ Construct WB SR-84, north side and EB SR-84, south side
- √ Complete local cross street improvements and signal installation at University Dr.
- √ Construct the express lanes (2403 to 2414) – used as traffic diversion
- √ Construct EB, north side express lanes and WB, south side express lanes interior widening (2414 to 2450), including south and north widening of bridges 860391 and 860392– used for traffic diversion
- √ Construct the express lanes (2450 to 2473) – used as traffic diversion

*Phase 2*

- √ Construct WB I-595 on the north side and WB SR-84 on the south side; construct EB I-595 on the south side and EB SR-84 on the north side
- √ Construct ramps Q-1, Q-2, Q-3, P-2,P-3, N and O; with bridges 000122, 000116, 000123, and modifications to 860391/392

*Phase 3*

- √ Close and rehabilitate existing ramps at 2443 and 2490
- √ Close ramp N and reconstruct with first span of bridge 860390, closed for Max. 45 days
- √ Complete express lane construction (2473 to 2500)

*Phase 4*

- √ Complete EB I-595 reconstruction and barrier wall as required

#### 4.3.3.7 Zone 7 - Davie Road, Through Turnpike, to SR-7 and the Viaduct (Roadway Construction Team 2)

Greenway

- √ Construct greenway on north and south sides of the NNRC, from Davie Rd. to SR-7. Complete bridges (000204 and 000205) at Davie Rd. and SW 25th Ave. with final connection at east end of SW 25th

Roadway

*Phase 1*

- √ Widen WB, north side and EB SR-84 south side
- √ Construct ramps U-1, partial U-2, U-3, U-4, U-9, U-10, U-11, T-1, T-2, T-3, T-5, T-11, T-15, partial T-16 partial R-7 and R-9 direct connects including all related structures to the viaduct.
- √ Construct WB SR-84 temporary pavement (various locations)
- √ Construct temporary pavement (express lanes – various locations)

- √ Construct EB SR-84 temporary pavement (various locations)
- √ Construct ramps T-10 and T-16, utilizing interim temporary pavement for T-10 to WB I-595 traffic flow
- √ Construct temporary pavement in the median of SR-7 to accommodate night closures for bridge construction
- √ Open T-10 and T-16 to traffic
- √ Construct express lanes (2550 to 2552)

*Phase 2*

- √ Construct WB I-595, north side and WB SR-84, south side
- √ Construct EB I-595, south side and EB SR-84, north side
- √ Complete ramps R-11, R-12, S, T-1, T-9, T-10, T-11, T-13, U-2, partial U-3 and U-4, U-5, U-6, U-9 and V-1
- √ Complete the express lanes connection to the viaduct (2591 to 634)

*Phase 3*

- √ Complete construction of R-7 and R-9 direct connect structures and MSE walls
- √ Remove temporary pavement express lane and construct to final (2510 to 2530)
- √ Divert WB I-595 into express lanes to complete final bridge 000033 spans
- √ Complete U-3 and U-4. Complete final EB and WB I-595 exterior widening and T-5
- √ Complete the express lanes

#### 4.3.3.8 Zone 8a – NB and SB South of I-595 to Griffin Road (Roadway Construction Team 2)

Roadway

*Phase 1*

- √ Construct NB and SB turnpike exterior widening with T-1, T-4, T-5, T-7, T-9, T-10, and T-17 with all associated structures utilizing temporary pavement as needed to keep all ramps open to traffic
- √ Divert Turnpike traffic to 3 lanes each direction and move to center of roadway
- √ Construct temporary pavement traffic diversion to NB Turnpike for final R-7 and R-9 spans

*Phase 2*

- √ Complete all interior NB and SB turnpike work complete the phase 1 ramps
- √ Complete ramps T-1, T-5, T-9 and T-10 with associated structures

*Phase 3*

√ Complete R-7 and R-9 final connections with T-1 and Turnpike

*Phase 4*

√ Complete existing ramp rehabilitation for T-1, T-4, T-5, T-7 and T-10

#### 4.3.3.9 Zone 8b – NB and SB Turnpike, North of I-595 to Peters Road (Roadway Construction Team 2)

Roadway

*Phase 1*

√ Complete R-7 final span from the north side of NNRC to the SB Turnpike shoulder

√ Complete all exterior East and West side Turnpike widening and all sound barriers.

*Phase 2*

√ Complete the internal express lane construction and final direct connects with operational toll facilities

### 4.3.4 Structures

Dragados is planning to divide the structures according to the following:

- GLF Construction Corporation, a key contractor as per the proposal, will build a total of 18 structures as follows:

13 Structures in the Turnpike Interchange (Zones 7, 8a & 8b):

| Bridge No. | Description |
|---|---|
| 000025 | Ramp U-4 over Ramp U-3- Braid |
| 000021 | Ramp T-16 over SR-84 WB and NNRC |
| 000022 | Ramp T-7 over Drainage Pond |
| 000023 | Ramp T-5 over Turnpike |
| 000026 | Ramp T-9 over Ramp T-15 |
| 000031 | Ramp R-9 Direct Connect |
| 000032 | Ramp R-7 Direct Connect |
| 000033 | Ramp R-7 Direct Connect |

| | |
|---|---|
| 000125 | Bridge Ramp T-1 over Ramp T-9- Braid |
| 860560 | Ramp T-9 Cellular Bridge Widening |
| 860533 | Bridge Widening, NB Turnpike over I-595 |
| 860559 | Bridge Widening, Ramp T-1 over Turnpike |
| 860562 | Bridge Demolition, Bridge over Turnpike |

5 Structures in Braided Ramps (Zones 3, 5 & 6):

| Bridge No. | Description |
|---|---|
| 000105 | Ramp E-2 over Ramp G (EB)- Braid |
| 000107 | Ramp E-2 over Ramp H (EB)- Braid |
| 000111 | Ramp K-2 over Ramp M (EB)- Braid |
| 000122 | Ramp P-2 over Ramp P-3 |
| 000123 | Ramp Q-3 over Ramp Q-2 (WB)- Braid |

Dragados is planning to joint venture with Baker Concrete to perform the widening of structures at the intersections of Flamingo Road (bridges 000102, 860368 and 860369 in Zone 2), Pine Island Road (bridges 000112, 000113, 000114, 000115 and 860358 in Zone 5) and University Drive (bridges 000116, 860391, 860392 and 000119 in Zone 6).

- Dragados intends to self-perform a significant number of the remaining structures, that number will be further detailed in future updates of the PMP.

### 4.3.5 Roadway

As defined in the Organization Chart, the Roadway works will be performed by two teams:

- Roadway Construction Team 1 - Zones 1 to 6
  - This team has two groups: Group 1: Zones 1, 5 and 6; Group 2: Zones 2, 3 and 4

- Roadway Construction Team 2 - Zones 7, 8a and 8b

The first phases of the project will start in Zone 5 (September 2009), Zone 7 (September 2009) and Zone 2 (November 2009). It is DUSA's intentions to have at least three different subcontractors doing the roadway work at each one of the zones referenced before. Up to 5 different subcontractors can be doing the roadway work and drainage may be part of the scope of work of each subcontracted or be parcelled out to a separate subcontractor.

### Construction Management Interface with QA/QC

Quality is an integral part of the construction management approach. To this end, a Construction Quality Control Management Plan (CQCMP) has been developed as a working document within the overall QMS with interfaces to the DQMP. The CQCMP defines the quality control organizations along with processes needed to assure that the specified materials are used and that the installation is acceptable to produce the required end product. The procedures have been distributed to all employees according to their duties and its affect will not be compromised.

QA/QC interface occurs during the pre-construction meetings that will be held for each new major work element so that all staff understands the requirements, and the materials meeting those requirements are available. Toolbox meetings are then held with the crews to explain requirements and to assure the necessary skills are available within the crews to do the work right the first time. Work will begin only when training of a core group of workers is accomplished.

Construction supervision and crews will discuss issues with the QA/QC organization before or as the work is accomplished. The QA/QC organization's first responsibility is to ensure the work gets done right through helping construction crews understand the requirements. The quality staff must also be aware that the work is being done correctly or see that it is corrected. Additionally, the QA/QC organization staff will interact with the construction and design staff in order to follow up on construction and constructability issues affecting design and construction. The construction staff, led by the relevant segment managers and with concurrence from the Engineering Manager and Design Manager, will develop a disposition and suggested actions to improve performance. (Note: For more detailed information refer to the QMS)

As the Project enters the operating period, I-595 EXPRESS LLC will provide a seamless transition of quality management responsibilities in large part facilitated by the I-595 EXPRESS Team's involvement during the implementation phase and due to I-595 EXPRESS LLC's initial input and ongoing involvement from the procurement phase through handback.

Through this process the I-595 EXPRESS Team will be able to determine and deliver the most economical and feasible construction management approach to provide FDOT with a high quality product on opening day and maintain a quality facility throughout the term of the Contract.

# 5 Interrelationship Between Design and Construction Activities

In order to achieve the optimum quality project by the prescribed deadlines, it is imperative to provide meaningful interface between the design and construction staff starting from the proposal phase and throughout design, construction, and operations and maintenance. The long-term relationship between initial design, construction, and operations and maintenance phases is imperative to provide best value with lowest risk and in consideration of the whole life of the asset.

The I-595 EXPRESS Team has focused on elements of the Project and identified potential areas where efficiencies and optimizations within the Project design and the Project schedule can be realized. Working in a collaborative team fashion, not only were the Project's design elements defined, but also the delivery of design packages necessary to support the construction and O&M functions. Examples include the following:

- Sequencing the construction in phases to allow for minimal impact to traffic operations and safety, without creating unnecessary and costly temporary facilities or difficult accessibility issues
- Dividing the Project into the optimum number of parts (work packages) for construction planning
- Planning the number of design packages to match the construction packages so design/construction coordination and management oversight is facilitated and enhanced
- Establishment of advance design packages for Greenway West and Greenway East including ground mounted ground barriers, and component construction packages, such bridge foundations, substructure and superstructure; drainage and roadway (up to top of pavement) and above pavement – signing, pavement marking, signals and lighting.
- Structuring the packages for direct implementation, with respect to specific subcontracts to other companies
- Determining the approximate design and construction staffing, and equipment and material resources that would be required to keep packages within the practical limits of the marketplace
- Scheduling the approximate time frame for design and construction so that target dates could be accurately planned
- Developing the most suitable organizational structure for efficient project management and delivery of new works

Based on the Construction Phasing/Sequencing Plan developed and described in detail in Sections 3 and 4, all design and construction activities will be identified in the master schedule for the Project and resource loaded to ensure timely project delivery and appropriate allocation of staff. As shown in the design and construction organization charts provided in Appendices 11.4 and 11.5 in this document, the project staffing is built around dividing the work into nine zones. This is to ensure that the Project is broken down into logical and manageable sections for a majority of the work including roadway and bridge related items. It allows parallel activities to facilitate delivery of the Project in the least time possible.

Both on an individual segment and system-wide basis, design and construction staff will interface continuously. Examples of this interface during the design phase include: project controls; constructability review; construction packaging; construction phasing and sequencing; and over the shoulder (OTS) design reviews. In addition, weekly technical coordination meetings will be held with construction and design management staff in attendance. The purpose of these meetings is to discuss technical issues and approaches to be used in the design, construction package scope, and schedule.

During the construction phase, the design team will provide construction support services, interfacing with the construction team by responding to Requests for Information (RFI), conducting shop drawing reviews, preparing revised designs to respond to changed conditions or issuing design revisions, and providing design assistance for resolving non-conformance issues. The design staff will also be available for field reviews to clarify the plans and specifications and answer other questions regarding the construction documents. The field staff provided by the design team will review construction activities and QC reports to confirm that the Project is constructed in general conformance with the plans and specifications. Additionally, the design team will prepare record drawings upon construction completion.

Project success will not only require an interrelationship between design and construction, but O&M staff as well. This “whole team” approach has been used from the onset of the initial proposal development. A lifecycle cost, asset management approach, integrating the design team, construction team and I-595 EXPRESS LLC’s O&M technical team will continue through design, with each team bringing their unique perspective to the Project and gaining an appreciation for initial cost, maintenance cost and long-term implications on finance and traffic management.

# 6 Approach to Addressing Life Cycle and Environmental Compliance

Elements from Section 3 Design Management Concept will be utilized to form various Task Forces. Each Task Force is formed by amalgamating key design representatives with construction team leaders and O&M managers. Each Task Force will then oversee specialized aspects of the Project, including construction means and methods, material and product selection for durability, ease of maintenance, and permit compliance as examples. This approach provides a detailed look into the design and construction process as it pertains to each phase of work, and allows us to ensure that the Project is delivered in accordance with the commitments set forth in this PMP.

As each Task Force contains a team of individuals specialized in certain design, construction, and O&M issues, it allows I-595 EXPRESS LLC, DUSA, and AE to work together to address these important constructability, durability, maintainability, and environmental compliance issues. The Task Force also conducts regular quality control reviews and design optimizations through regular meetings with FDOT and other stakeholders and provides directions to both the designer and contractor to ensure all aspects of the Project are considered and technical excellence is achieved.

Collectively, the Task Force team(s) conduct OTS reviews of the designs throughout the design period. Teams working with the designers and the contractors allow the final product to have virtually all the constructability issues designed into the product, as opposed to them being identified at a later stage in the design or construction process, causing both schedule and cost impact to the Project. Additionally, this allows DUSA to tailor the construction to suit the rigid schedule, budgetary requirements, and ensure public safety.

# 7 Approach to Cost and Schedule Management

Cost and Schedule Management:

I-595 Express LLC has contracted with multiple companies for the I-595 Project. The largest contract was signed between I-595 Express LLC and Dragados USA for the design and construction of the entire project. Other smaller lump sum turnkey contracts were signed with Jorgensen Contract Services, and HNTB Corp. as well as other less significant contracts that will not affect the cost or schedule of the overall project.

## 7.1 CONSTRUCTION:

The large contract between I-595 Express LLC and Dragados USA will maintain the accuracy of the construction schedule agreed upon and signed in the Engineering, Procurement and Construction Agreement (EPC). This documents states specific scheduled milestones for each month of the project that outlines lane closures, major structure construction, traffic re-routing, lane openings, etc. In order to receive payment from I-595 Express LLC, Dragados USA must meet the requirements of the construction milestones outlined in the EPC schedule. This allows I-595 Express to control the schedule and the flow of money to the contractor. For example in order to qualify for a payment for “Re-Route Traffic” and “Ramp X Open for Traffic” means that the following activities have been completed in the corresponding zone and for the corresponding Phase where applicable:

1. Clearing and grubbing;
2. Demolition of the existing roadway;
3. Excavating, Grading/Embankment, including Silt Curtains, Bulkheads, MSE walls and Retaining Walls;
4. Installation of the Drainage system, including the Piping and the Drainage Structures;
5. Utility Work;
6. Installation of the Electrical infrastructure;
7. Installation of the Sound Barriers
8. Construction of the Pavement and the temporary or permanent Traffic Barriers;
9. Striping and installation of Signage, temporary or permanent

Given the nature of the Concession Agreement and the lump sum construction cost between I-595 Express LLC and Dragados USA, the ability to track and maintain cost is an internal process within each organization. Each organization will monitor their cost to ensure the success of the project. However, using the EPC agreement I-595 Express LLC has the ability to pay only for work that fully complies with all contractual abligations. The Lenders Technical Advisor will also receive a report from I-595 Express with regards to the progress of Dragados USA each month in order to certify payment of the milestones.

## 7.2 DESIGN:

Dragados USA has signed a contract with AECOM for the design of the corridor. AECOM is responsible for all design aspects of the project. AECOM will work with Dragados, the Concessionaire and FDOT to facilitate this process.

## 7.3 CONCESSIONAIRES CEI:

I-595 Express LLC has signed a turnkey contract with HNTB Corp. to perform CEI services on the project. HNTB Corp. will receive equal monthly payments for the duration of the project based on their compliance with the scope of work outlined in the contract between I-595 Express and HNTB. Certain deliverables have been agreed upon between the two parties that will satisfy the contract and continuation of monthly payments. If deliverables and scope are not meet the Chief Executive Officer along with the Board of Directors of the I-595 Express LLC will have the ability to exercise certain rights within the contract to ensure that HNTB remains compliant.

## 7.4 OPERATIONS AND MAINTENANCE:

I-595 Express LLC has also signed a turnkey contract with Jorgensen Contract Services to perform all operations and maintenance work on the corridor. Jorgensen Contract Services will receive equal monthly payments based on their compliance with the scope of work outlined in the contract between I-595 Express and Jorgensen. Certain deliverables have been agreed upon between the two parties that will satisfy the contract and continuation of monthly payments. If deliverables and scope are not met, the Chief Executive Officer along with the Board of Directors of the I-595 Express LLC will have the ability to exercise certain rights within the contract to ensure that Jorgensen remains compliant. Jorgensen will also be responsible for deductions to the Final Acceptance Payment for issues caused or incurred on items within their scope of work. Deductions will be passed through to Jorgensen, making them responsible for their own work.

## 7.5 OTHER CONTRACTS:

The other remaining contracts will be monitored by the Chief Executive Officer in order to maintain control of the project. Each contract will have provisions of compliance with the work that is being performed.

## 7.6 INTERNAL COST:

All organization within the I-595 project will be responsible for monitoring their internal costs. Both I-595 Express LLC and Dragados USA will takes steps to ensure that contractors have the funding and capability to control the costs within their scopes and are fully responsible to perform work on time and on budget. I-595 Express and Dragados USA will track budgetary spending and take action when necessary to increase or decrease spending habits.

# 8 Approach to Safety

The personal safety and health of the general public and each employee of the I-595 EXPRESS Team is of primary importance. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal safety and health of the general public and each employee. DUSA will comply with all applicable Federal, State, and local laws, and provisions and policies governing safety and health, including 29 CFR 1926, and all subsequent revisions and updates.

The I-595 EXPRESS Team's ultimate goal is "zero accidents". The objective of the Team's Health and Safety Program is to reduce the number of disabling injuries and illnesses to a minimum. A designated full-time Health and Safety Officer will be assigned to the Project by DUSA ensuring that safety requirements are met throughout the term of the Project. I-595 EXPRESS LLC will also assign a Safety Officer at the Concessionaire level to provide oversight of the I-595 EXPRESS Team's safety elements, plus provide longer term safety procedures for the O&M portion of the Project. The O & M Manuals also contain a Safety Manual for Operations and Maintenance Safety on the corridor.

Corporate Management, supervisors and employees will embody the proper attitudes toward injury and illness prevention. It will also require cooperation in all health and safety matters, not only between corporate management, supervisors and employees, but also between each employee and his/her fellow workers. Only through such a cooperative effort can a safety record, in the best interest of all, be established and maintained. The Health and Safety Program will therefore include the following components:

## 8.1 JOB SPECIFIC TASK ANALYSIS AND CONTROLS

Prior to commencing the Project, the I-595 EXPRESS LLC and DUSA management and the Health and Safety Officer will meet and develop a Site Safety Specific Health and Safety Program outlining the scope of work for the job. Once this is complete, operations and exposures that will require Job Specific Task Analyses (JSTA) will be identified.

The Construction Manager or designee, will prepare a JSTA for submittal outlining all hazards and controls. Controls will include the following abatement steps, if possible: elimination, isolation, engineered controls, and administrative controls. The DUSA Health and Safety Officer and I-595 EXPRESS LLC Safety Officer will review the JSTA. A review with affected workers and sign-off will be required prior to commence of work.

## 8.2 SAFETY SURVEYS

I-595 EXPRESS LLC and DUSA will conduct a program of health and safety surveys to identify and eliminate or control unsafe working conditions or practices, to control health hazards, and to comply fully with the health and safety practices. This will include daily site safety surveys by the DUSA's Health and Safety Officer and periodic site safety surveys with I-595 EXPRESS LLC's Safety Officer.

## 8.3 TRAINING OF PROJECT MANAGEMENT TEAM

I-595 EXPRESS LLC and DUSA will conduct in-house training sessions. These training sessions have created a forum that has developed and enhanced the skills of its employees while promoting a "teamwork" approach to constructing its projects. The specific goals of the training sessions include the following:

- Improve communications among employees
- Educate employees in all areas of construction
- Promote lateral sharing of knowledge between project teams
- Adapt project management functions to corporate standards

## 8.4 TRAINING THE WORKERS

Training all employees in good health and safety practices is important. To accomplish this, DUSA will perform weekly safety meetings conducted by jobsite managers and competent persons. All meetings will be conducted on-site, documented and tailored to the jobsite.

## 8.5 SUBCONTRACTOR HEALTH AND SAFETY PROGRAM

All I-595 EXPRESS LLC and DUSA subcontractors are required to submit a Site Specific Health and Safety Program prior to commencing work. All operations and exposures associated with their work and controls that will be implemented will be included in their JSTA's. All subcontractors are required to attend the weekly safety meetings and disseminate this information to their employees. Subcontractors found to be working unsafely will be informed, first verbally, secondly in writing and if still uncorrected possible termination of the contract may result. In addition, if there is an imminent danger to life and health situation observed, an operation will be stopped and immediate termination of the contract may result.

## 8.6 ACCIDENT INVESTIGATION

Should they occur, DUSA will investigate every accident promptly and thoroughly to find the root cause and correct the problem in order to take measures to avoid its reoccurrence. Therefore, each manager must utilize the Supervisor's Accident Investigation Report to determine the cause and means of preventing recurrences.

## 8.7 EXPOSURE ASSESSMENT

Exposures Assessment will be developed for the Project in accordance with the major operations to be performed. Table 1.1-1 on next page shows an example of the Exposure Assessment.

## 8.8 PUBLIC SAFETY PLAN

Public safety during construction is considered to be the highest priority on every project. The Project's construction phasing/sequencing has been established to ensure all public safety is maintained to today's standards or better. The Public Safety Plan will cover all facets of construction issues with recommendations on mitigation. The plan will be regularly updated to suit the local issues and technological advancement, with provision made for community events as they arise during the construction period.

The Public Safety Plan also provides for the O&M activities. I-595 EXPRESS LLC's Safety Officer will ensure that the Plan is followed using the following minimum principles:

- Public and motorist information is conveyed on a regular basis through signage and media
- Work zone maintenance and rehabilitation is appropriately strategized
- Travel demand and incident management is correctly managed
- Detailed plans are in place for potential utility failures and dangerous spills

By effectively implementing all of the above items, I-595 EXPRESS LLC and DUSA will be successful in reducing the number of accidents.

*Table 1.1-1 Exposure Assessment*

| Operations | Exposures | JSTA's and Controls |
|---|---|---|
| Maintenance and Protection of Traffic Plans | Traffic Accidents | > Set out traffic patterns in accordance with plan specs and FDOT requirements |
| | Struck by Vehicles | > Follow JSTA developed for laying out patterns<br>> Employees will wear proper PPE |
| | Temporary Signs and Striping | > Will be preformed by Subcontractors<br>> JSTA's will be required before work begins |
| | Vehicle Operations | > JSTA will be developed for this operation and reviewed by workers<br>> All workers required to wear PPE |
| Construction of Temporary Roadways | Struck By Vehicles | > Drivers and Operators trained on Traffic Patterns |
| | Silica Dust | > JSTA's will be required before work begins |
| | Noise | > Follow JSTA developed for laying out patterns |
| Bridge Demolition | Falls | > There will be a meeting with the subcontractor to discuss operation(s) in depth |
| | Equipment Operation | > Subcontractor to obtain all necessary permits |
| | Lead Exposure | > Subcontractor to obtain all necessary permits |
| Bridge Construction/ Reconstruction Rehabilitation | Equipment Operations | > JSTA will be developed for this operation and reviewed with workers<br>> All workers required to wear PPE |
| | Concrete/ Silica | > Drivers and Operators trained on Traffic patterns |
| | Falls | > Back up Alarm vehicles and equipment that operate within a highway jobsite |
| Drilling Piles and Caissons | Equipment Operations | > JSTA's will be developed for this operation and reviewed with workers |
| | Noise and Eye Protection | > All workers required to wear PPE |
| | Collapse/ Cave-in/ Engulfment | > JSTA's will be developed for this operation and reviewed with workers<br>> All workers required to wear PPE |
| Trench Excavations | Equipment Operations | > Drivers and Operators trained on Traffic Patterns |
| | Falls | > Back -up Alarm vehicles and equipment that operate within a highway jobsite |

# 9 Interface with FDOT District 4 and Others during Design and Construction

On-going communication activities with key agencies will be critical to the success of the Project as they have the ability to influence the design, schedule of activities and acceptance of the Project. It has been I-595 EXPRESS LLC's experience that exchanging information early and throughout the process allows these agencies to provide input into the design to readily address any adverse effects anticipated. The intent will be to establish a reciprocal flow of information and open dialogue so that all issues are identified, discussed and resolved together during the design process in the early stages where they can be more easily accommodated. This will facilitate a more rapid issuance of authorization for the Project to proceed.

Interface with FDOT during design will start at early stage of Corridor Master Plan (CMP) development. Initial meetings with District Drainage, Structures, Geotechnical, and Construction Engineers and Landscape Architect are planned shortly after NTP1 to ensure that development of individual Master Plans and the CMP proceed in accordance with District 4 vision.

If requested or agreed to by FDOT, a number of Task Forces, sometimes involving same personnel, will be established to enhance communications with FDOT and the stakeholders within the corridor. Task Force meetings may include these specific work elements:

- Maintenance of Traffic
- Drainage
- Bridges
- Roadway
- Utilities
- ITS
- Permitting
- Operations and Maintenance

The Task Force groups will hold regular minuted coordination meetings with all parties associated with the Project to discuss issues such as: schedule slippage, design issues and resolution of unknown technical/design issues. (Note: these Task Forces are similar to the ones mentioned in Section 6, and may be a continuation thereof during the construction period, thereby providing essential continuity for the participants.)

As part of the Project Schedule and Construction Sequencing Plan, another key component is the interface between the I-595 EXPRESS LLC and FDOT. During the initial stages of the project start-up, the I-595 EXPRESS LLC, in coordination with DUSA and AE, will work very closely with FDOT in refining the construction staging plan to further reduce the overall impact to the public, emergency services, and the environment. This refinement process provides FDOT further insight into the project controls, design innovations and construction delivery.

## 9.1 Document Submittals

The Concessionaire will rely on a document management system that will ensure proper and timely submittal of all required documents to FDOT. The guidelines will follow the submittal requirements specified in the Concession Agreement as further described in Appendix 2 of the CQCMP. The Concessionaire will submit all

documents from sub-contractors in the required time frame. The document management system will allow users to upload files and documents that can be reviewed and submitted to FDOT. A series of quality control procedures will be implemented to ensure the consistency and correctness of each and every document submitted. The concessionaire will implement this well-designed and secure electronic document control system. The Document control systems will provide a safe and secure place for documents as well as a means for circulating only the current revision while keeping old revisions on file. Such a system also needs to allow users to create new revisions, route them for approval and inform other users when a new revision supersedes the document they've been using.

## 9.2 STAKEHOLDER COMMUNICATION

Communication is the I-595 Corridor Improvement Project's primary tool for promoting cooperation, participation, and coordination between all stakeholders. The following organizations and companies are considered stakeholders in this project and will be a key part of this communication plan. A complete list of the federal, state, and local permitting agencies is provided in the Environmental Compliance Plan.

| The Concessionaire | Florida Department of Transportation | The Public | Federal Entities | Local Entities |
|---|---|---|---|---|
| I-595 EXPRESS LLC Infrastructure Development | FDOT District 4 | General Public | US FWS | Broward County |
| Dragados USA | FDOT Central Office | Home Owners Associations | NMFS | Affected Cities and Municipalities |
| Lead Designer - AECOM | Florida's Turnpike Enterprise | | USACE | Utility Agency Owners |
| CEI - HNTB | Oversight CEI | | FHWA | SFWMD |
| Sub-Contractors and Sub-Consultants of I-595 EXPRESS LLCID | Corridor Design Consultant | | US Coast Guard | |
| Sub-Contractors and Sub-Consultants of Dragados | | | | |

| Other Entities (Expanded) | | | |
|---|---|---|---|
| South Florida Regional Planning Council | South Florida Regional Transit Authority | South Florida Regional ITS Coalition | Broward County Environmental Protection Department |
| Broward County Traffic Engineering Division | Broward County Traffic Management Center | Broward County Parks and Recreation Dept. | Broward County Transit |
| Broward County Metropolitan Planning Org | Broward County Technical Coordinating Committee | Broward County Community Involvement Roundtable | Broward County Aviation Dept. |

| | | | |
|---|---|---|---|
| Broward County Emergency Management Office | Broward County Fire Rescue | Broward County Commissioners (Districts 1-9) | Port Everglades |
| City of Ft. Lauderdale | Town of Davie | City of Plantation | City of Sunrise |
| City of Weston | Unincorporated Broward County | Utilities: See Below | Broward County Environmental Protection Department |
| Florida Department of Environmental Protection | South Florida Water Management District | U.S. Army Corps of Engineers | Federal Aviation Administration |
| United States Coast Guard | Central Broward Water Control District | Old Plantation Water Control District | Plantation Acres Improvement District |
| Tindall Hammock Irrigation and Soil Conservation District | The Southwest Coalition of Homeowners Associations | Broadview Estates | Hawks Landing |
| Everglades Lakes | Lago Mar Golf Course | Jacaranda Country Club | Pine Island Ridge Golf Course |
| Arrowhead Country Club | Freeway Incident Management Team | I-595 Road Rangers | Florida Highway Patrol Troop L. |

| Utility Agency Owners | | |
|---|---|---|
| Owner | Contact | Phone Number |
| Alligator Alley Pipeline | Richard Johnson | 954-474-1385 |
| AT&T Long Distance | Craig Petrie | 407-578-8000 |
| AT&T Florida | Otis Keeve | 954-723-2540 |
| City of Sunrise | Tim Welch | 954-888-6037 |
| Comcast | Leonard Maxwell-Newbold | 954-534-7380 |
| Ferncrest | Robert Salerno | 954-587-8833 |
| FPL Distribution | Nelson Gonzales | 954-321-2056 |
| FPL Fibernet | Robert Mendoza | 305-522-3840 |
| FPL Transmission | Neelesh Shah | 561-694-3507 |
| Level 3 | Tony Kowaleski | 954-217-6773 |
| Teco | Alex Roche | 954-453-0817 |
| Town of Davie | Bill Peele | 954-327-3743 |
| • *A Complete list of Permitting Agencies can be located in the Environmental Compliance Plan.* | | |

## 9.3 PERMITTING

A complete discussion of the environmental permitting activities that have already taken place and that will be conducted in the future can be found in the Environmental Compliance Plan, and permits that have been received to date are listed in Section 3.3.

The section of I-595 that will be impacted by the project is located in Broward County, Florida within portions of the municipalities of Plantation, Davie, and Ft. Lauderdale. The Project will entail improvements of existing roadways, construction of new roadways, bridge construction, construction of adjacent greenways, inclusion of a future transit line along the corridor, and other improvements. The NNRC is located north of the SR-84 WB lanes. Several miles of additional bulkhead are recommended for construction along the canal as part of the project. The complexity of the Project will therefore require coordination with several local, state, and federal agencies.

Securing approvals for the environmental and construction permits are the first and primary challenge to meeting timely commencement of every construction work activity. The processes for obtaining the necessary permits will be rigorously tracked using the interface section of the Project Schedule. The permitting processes required for the various types of work, including permit preparation and agency review and approval, are incorporated into the interface schedule.

During the permitting process, it is anticipated that the I-595 EXPRESS Team will meet with regulatory agencies to ensure compliance with all requirements and to obtain approval for the necessary permits. The FDOT project manager, environmental permit coordinator and other FDOT personnel will be notified in advance of all scheduled meetings so that a FDOT representative may attend. In addition, FDOT personnel will be recipients of all permit-related correspondence, including documentation of preliminary research conducted, meeting minutes, and other information.

The I-595 EXPRESS Team will be responsible for the completion of all permits initiated by FDOT and all additional permits and associated fees required during the Project. Permit modifications necessary based on design changes also will be the responsibility of the I-595 EXPRESS LLC Team.

The I-595 EXPRESS Team also will assist the FDOT Permit Office in reviewing permit applications (such as access management, drainage connections, utilities, and general use) submitted by other entities in conjunction with the Project. The I-595 EXPRESS Team will review and provide comments on permit applications within a 21-day period and will coordinate with the permittee to allow the permitted work to commence within a reasonable amount of time.

- Local Permits

The Project will be located entirely in Broward County, Florida. Therefore, several permits from Broward County will be required during design and construction phases. Coordination with Broward County Environmental Protection Department (BCEPD), Broward County Highway Construction and Engineering Division (BCHCED), and Broward County Development Management Division (BCDMD) will be necessary. Because portions of the I-595 project will be located within the city limits of Sunrise, Davie, Plantation, and Fort Lauderdale, municipal permits also will be required. The Town of Davie requires approval of the site plan by the Planning and Zoning Division; several permits from the Engineering Division, including site development, fill, drainage, paving and grading, clearing and grubbing, traffic flow modifications/street closure, and seal coat and stripping permits; submission of a stormwater pollution prevention plan to the Engineering Division; and a tree removal/relocation permit from the Planning and Zoning Division. The City of Plantation and the City of Fort Lauderdale require contractors to obtain building permits and land clearing/landscape permits. Fort Lauderdale also requires an engineering permit through the Engineering Division. Tree removal permits are not anticipated to be required from the municipalities of Plantation and Ft. Lauderdale.

- State Permits

The primary State of Florida permitting agencies are the Florida Department of Environmental Protection (FDEP), SFWMD, FDOT, and the FTE.

The SFWMD Individual Environmental Resource Permit, the most significant permit required for the project, is required to complete major reconstruction of I-595 and SR-84, construct several bridges over the NNRC, install new stormwater management systems, and perform dredge and fill activities within the NNRC.

- Federal Permits

The USACE is the primary federal agency that will be involved in the permitting process for the I-595 process. The United States Coast Guard (USCG) Bridge Permit approval will be required for the bridge work over navigable sections of the North New River Canal.

## 9.4 UTILITY COORDINATION MEETINGS

The utilities will be reviewed with the various stakeholders during review/coordination meetings. Preliminary utility meetings will most likely be at this time, where stakeholders will define their requirements in detail of what is expected to be completed by I-595 EXPRESS LLC to ensure that the utility requirements are a "Fast Start", the I-595 EXPRESS Team has already initiated several successful meetings with many of the stakeholders to ensure a smooth transition into the permitting, design and construction process.

To further facilitate the utility coordination process, the I-595 EXPRESS Team will establish a Utility Work Plan that addresses various issues and procedures as follows:

- √ Identification and location of existing and utilities along the corridor
- √ Communication and coordination requirements with Utility Agency Owners (UAO's) to address project issues as well as the interaction with FDOT's District Utility Office
- √ Action Plan to address required utility accommodations
- √ Action Plan to address unknown or newly discovered utilities as well as utility betterments and/or future installations
- √ Scheduling of utility adjustment work
- √ Documentation of utilities along the corridor, utility coordination process and final disposition

As in all projects, every effort will be made to accommodate existing utilities with minimal relocations and/or disruption of service. When utilities must be relocated, utility work sequencing will be reviewed and compared to project construction staging and milestones to minimize costs, disruption of service and the need for multiple relocations of the facilities. The I-595 EXPRESS Team has already identified several locations where advanced utility relocations can be performed. These include:

- √ Sta. 3198+60 to Sta. 3206+60 along EB SR-84 where the relocation of an existing 16-inch force-main belonging to the City of Sunrise is required for the construction of the King's Manor Estates Community Noise Wall.
- √ Sta. 3411+40 to Sta. 3416+80 along EB SR-84 where the relocation of an existing 8-inch water-main belonging to the City of Sunrise is required for the construction of the Arrow Head Golf and Tennis Club Noise Wall.

- √ Along EB SR-84 where the existing aerial utility pole line carrying FP&L, Comcast, AT&T and Level 3 will need to be shifted to the north to minimize the utility impacts on the roadway improvements. Discussions with all four stakeholders have been held to review the sequencing of the movement of this line.

Additionally, as referenced in the MOT Plan, utility relocation and/or adjustment requirements have been considered in the sequencing of the work. This not only evaluates and properly ties the construction sequencing, but assures that areas are not disturbed twice.

Coordination and sequencing for utility accommodations will be controlled through the development of a Master Utility Schedule tied to the CPM schedule. This utility schedule will be reviewed at the Monthly Utility Coordination Meetings planned from the commencement of the design phase through construction. Additionally, coordination will be enhanced through utility documentation, correspondence, plans, and schedules.

The DUSA Utility Coordinator will be in charge of the utilities and will meet regularly with utility companies and municipal utility officials and serve as a liaison between these entities, I-595 EXPRESS LLC design and construction personnel and FDOT. He/she will coordinate the activities of the utilities, and is responsible for anticipating potential issues that may affect the Project schedule and quality, and plan contingency actions to avoid or minimize their impacts. The Utility Coordinator will have authority to facilitate the resolution of those issues.

## 9.5 WORKSHOP AND PARTNERING ACTIVITIES

As with any relationship on large, long-term contracts, there is the potential for conflict and disagreement. The manner in which these issues reach resolution may have a dramatic impact on the Project Schedule. To this end, the I-595 EXPRESS Team proposes a formal partnering process with FDOT and other Project stakeholders. The Team's belief is that partnering always works when all parties make the required commitment toward cooperation, communication, and a common goal. Following the first "Senior Management Partnering Session" held prior to commencement of Advance Construction Activities, an "Operational Level Partnering Session" is to follow prior to commence work on the I-595. Further Partnering Sessions will be organized to suit the job requirements as the constructions works evolve.

As mentioned, partnering will be extended to other participants beyond FDOT. The I-595 EXPRESS Team will encourage the utilities and environmental groups to join in partnering, which, through communication and common goals, will help expedite the permitting process and prevent delays.

An effective partnership requires vertical reporting, with our Chief Executive Officer working directly with FDOT's Project Manager on contractual and management issues. For horizontal interfaces, the Team's designers, constructors, and QA/QC personnel will work directly with FDOT engineers, reviewers and inspectors. The organization is structured to make these working interfaces easy.

The frequency of the partnering meetings will be dictated by the Project and the number of issues that arise.

## 9.6 CONCESSIONAIRE COMMUNICATION

The I-595 Express LLC (I-595 EXPRESS LLCID) will be the Special Purpose Vehicle created by I-595 EXPRESS LLCID to manage the I-595 Corridor Improvement Project. The concessionaire will be the key management team in charge of the entire project for 35 years. The Concessionaire also has an independent CEI company which will function as the QA component in the QA/QC of the construction. The CEI has the role

of verification testing and materials compliance in accordance with FDOT standards, code of Federal Regulations (23CFR637), and FHWA TA 6120.3. The Construction, or Design Build Contractor, is formed by Dragados USA, Inc. DUSA is primarily responsible for the construction of the entire I-595 Corridor Improvement Project. The Designer or Engineer will be responsible for all design and engineering activities of the project. The designer will be responsible for relaying information to the DUSA for the production of the project.

Goals:

- Inform and secure commitment from all project stakeholders to support and participate in I-595 Corridor Improvement Project.
- Support all project stakeholders so they may fully utilize the functions of I-595 Corridor Improvement Project Communication Plan in their key business processes.
- Inform all designers, contractors, oversight organizations, and employees on the need for transparent communication throughout the project.
- Provide a clear path for FDOT Oversight and support their efforts.
- Communicate internally on all issues necessary to keep the project on schedule.
- Communicate all issues related to the quality of the project, including self monitoring results and other QA/QC initiatives.
- Interface with FDOT Oversight CEI

## 9.7 COMMUNICATION WITH FDOT AND FTE

The Florida Department of Transportation is the owner of the project. FDOT will provide Oversight CEI services and general support of the overall project. The Florida Turnpike Enterprise is responsible furnishing, installing, testing, operating, and maintaining all SunPass ORT equipment.

Goals:

- Inform FDOT of all self monitoring results throughout the project
- Work with FDOT for internal and external communication activities including public outreach.
- Provide FDOT and Oversight CEI with all necessary data and information to avoid delays in the projects progress.
- Schedule meetings with FDOT per contract requirements
- Develop reports for FDOT per contract requirements
- Interface with FTE between construction activities and O & M activities concurrent to the projects location

## 9.8 COMMUNICATION WITH CONCESSIONAIRE CEI:

In general it shall be the responsibility of the CEI to administer and monitor the Contract such that the Project is constructed in reasonable conformity with the plans, specifications, and special provisions set forth in the Contract Documents. The CEI shall observe the Contractor's operations and monitor the progress and quality of work, as well as advise the Concessionaire of any significant omissions, substitutions, defects, and deficiencies including the proposed corrective action and final resolution of the non-conforming issue. This effort will also include on-site inspections, sampling and testing and engineering services performed by the CEI to support the I-595 Express LLC Quality Manager. The CEI will work with the DUSA Quality Control Department as well as the FDOT Oversight CEI to coordinate this effort in accordance to Appendix 11.7.

The DUSA QC, the CEI and FDOT Oversight CEI will utilize a chain of concurrent events that will occur on a daily, weekly, and monthly basis in order to create a steady flow of relevant and accurate information. The Quality Manager will be responsible for ensuring information is clearly available and delivered to all parties to avoid unnecessary delays in construction. A weekly schedule of construction activities, including anticipated material testing, will be submitted by the CQCM to the Quality Manager who will review and distribute it to both the CEI and Oversight CEI. This schedule will contain all planned activities for the following week, including operations that are pertinent to the quality control process of the project. Weekly coordination meetings between the CQCM, Oversight CEI, and Concessionaire CEI will be held to discuss major upcoming activities and previous issues arising from conflicts or non-conformities. In addition, monthly progress meetings will take place to discuss the updated CPM schedule submittal and ensure the project is on schedule.

A document management system will be in place to ensure that all documents reach the appropriate parties. Non-conformities found during an inspection or observation will be logged into a database accessible by the DUSA, the CEI, and Oversight CEI and FDOT. This will allow each organization to review the non-conformity and ensure that the issue was resolved before the construction continues. If major problems in the non-conformity resolution process are detected, the issue will be raised at the next weekly coordination meeting to discuss the problem. The CEI will also use the following procedures and protocols to streamline communication between FDOT, Oversight CEI and the DUSA:

- Forms to ensure appropriate distribution of documents to all required FDOT and DUSA staff, contractors, and suppliers.
- Tracking logs developed for material samples, material certifications, concrete quantities and concrete strength test cylinders to ensure samples and certifications were gathered and submitted per specifications and procedures.
- Staff meeting agendas to ensure personnel are updated with information concerning plan, specifications, or policy and procedure revisions.
- System to track plan revision, to ensure that all personnel were provided with the most up-to-date plans.
- Shop drawings submittal logs.
- Review comment logs and distribution procedures to ensure comments are clearly documented, responded to by the Contractor, and properly address in the plans.

## 9.9 COMMUNICATION WITH THE PUBLIC:

Public involvement has, and will continue to be an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. The Department's Public Information Consultant (PIC) will be charged with continuing the public information program currently underway and will be the point of contact during the design and construction phases of the Project. The Concessionaire will provide support for the public involvement effort as described in Volume II, Division II, Section 2, and Section M of the contract documents.

.Goals:

- Utilize the Public Information Officer to engage with FDOT on external communication efforts.
- Review and be aware of the Community Awareness Program (CAP)
- Concessionaire will assist CAP in providing outreach to the community
- Work with FDOT to initiate Public Meetings
- Supply FDOT with public information data.
- Provide information for newsletter and website

## 9.10 SPECIFIC COMMUNICATION

Specifically the Concessionaire will utilize the strength of the partnership between FDOT and I-595 EXPRESS LLC to exchange critical information. FDOT will have access to all relevant information provided by the CEI, DUSA, and I-595 EXPRESS LLC. Coordination meetings will be held between both parties to ensure information is passed to the proper authority. I-595 EXPRESS LLC will also utilize the Communications Program created by FDOT as well as their Public Involvement Program.

Communication with Broward County will be made on a priority basis. Information specific to traffic management, construction delays, permitting, public involvement, and county issues will be filtered through the FDOT to Broward County. Any information that is of concern to the county will be reviewed by the FDOT and forwarded to Broward County. It will be at the discretion of the concessionaire and FDOT whether county involvement is necessary. Public notices, project status, and other important status issues, will be sent to Broward County on a monthly basis to ensure the progress of the project is known by the County. At any of the parties' request, meetings will be held to go over specific issues of common interest.

As discussed previously the CEI will work with the QA/QC team of the DUSA, as well as the Oversight CEI to share information. The CEI, QA/QC, and FDOT Oversight will utilize a chain of concurrent events that happen on a daily, weekly, and monthly basis that creates a steady flow of relevant and accurate information. Information will be clearly available and delivered to all parties to avoid unnecessary delays in construction. A weekly schedule of construction will be distributed by the QA/QC team of the DUSA to both the concessions CEI and Oversight CEI. This schedule will contain all planned activities including material testing requirements that are pertinent to the quality control process of the job. Specific Procedures and Protocols have been developed by the concessionaires CEI. These procedures can be located in Appendix 11.8 and 11.9.

Finally, I-595 EXPRESS LLC will utilize the Public Information Officer to communicate with the Public on all issues of the project. It will be the responsibility of the Public Information Officer for developing and implementing the procedures for coordination and communications between the Concessionaire and other

stakeholders. He/she is the primary project contact for public media personnel and disseminates information as required to public and private organizations and the general public. The Public Information Officer is responsible for providing technical documentation in support of the project website updates. They will meet with citizens and private groups to assist in resolving complaints and concerns. The Public Information Officer is responsible for developing communication and information dissemination procedures to implement policies issued by the Chief Executive Officer.

## 9.11 COMMUNICATION TACTICS

Stakeholders for different communication initiatives have been identified in the following table. They provide a brief strategy and identify the responsible entity for its execution. The communications activities and relationships described in this plan will change as the I-595 Corridor Improvement Project evolves.

Concessionaire communications strategies, responsibility, and tactics:

| Stakeholder | Strategy | Responsible | Tactics |
|---|---|---|---|
| Chief Executive Officer & Senior Management Staff | Outreach to the DUSA, Lead Designer, FDOT and all sub-contractors/consultants to maintain constant and accurate communication. This outreach also includes communication with external stakeholders (Broward County, Utilities, etc.) | Chief Executive Officer | Form clear lines of communication, hold regular meetings to coordinate objectives, take action when deemed necessary. Informational memos, weekly meetings, monthly meetings, shared schedules, open information. |
| Concessionaire Upper Management | Communicate with the DUSA for changes in road configurations and initiation/finalization of construction on various sections. This includes the interface with O & M on various construction issues and the FTE. | Operations Manager and Technical Director | Informational memos, weekly meetings, monthly meetings, shared schedules, open information. |
| The Public | Work with FDOT on all aspects of communicating with the public outline in the contract documents. Utilizing both internal and external communication networks. | Public Information Officer and FDOT | Present all available and necessary information to the public through various sources and methods of delivery. |
| Other Entities | Communicate all necessary information to public and private entities that will ensure the completion of the project. | Project Manager, Construction Manager | Plan meetings and distribute information to proper authorities when needed. |

| Stakeholder | Strategy | Responsible | Tactics |
|---|---|---|---|
| Concessionaires CEI | Forms to ensure appropriate distribution of documents to all required FDOT and DUSA staff, contractors, and suppliers.<br>Tracking logs developed for material samples, material certifications, concrete quantities and concrete strength test cylinders to ensure samples and certifications were gathered and submitted per specifications and procedures.<br>Staff meeting agendas to ensure personnel are updated with information concerning plan, specifications, or policy and procedure revisions.<br>System to track plan revision, to ensure that all personnel were provided with the most up-to-date plans.<br>Shop drawings submittal logs.<br>Review comment logs and distribution procedures to ensure comments are clearly documented, responded to by the Contractor, and properly address in the plans.<br>Verification testing and materials compliance in accordance with FDOT standards, code of Federal Regulations (23CFR637), and FHWA TA 6120.3. | CEI Manager | Informational memos, weekly meetings, monthly meetings, shared schedules, open information. |

## 9.12 COMMUNICATIONS ACTION MATRIX

The Action Matrix (shown in Figure 8.1) identifies the following and will evolve over the course of the project:

- Designate “owners” responsible for communications products and activities for each project milestone
- The resources required for these efforts in terms of personnel, resources, and equipment.
- A list of key messages and benefits statements, with an assigned message “owner” as a central point of contact
- Processes for vetting communications messages
- List priority groups targeted for participation

*Figure 8.1 – Action Matrix*

| Communication Item | Description | Purpose | Frequency | Media/Distribution | Audience | Responsibility |
|---|---|---|---|---|---|---|
| Steering Committee Meeting (Project Progress Meeting) | Major review of project including issues, changes, and schedules. | Informational- Review all issues from previous week and discuss future action items | Weekly | Status reports distributed via email, and powerpoint presentations | Project team members including FDOT Oversight | Chiel Executive Officer, |
| Technical Committee Meeting (Construction Progress Meeting) | Update of weekly schedule, issues, changes, resolve possible non-conformities, and progress | Review all schedule issues, non-conformities, design and build conflicts, progress issues, etc. | Weekly | Report/Memo in Email form | DUSA, O & M, CEI, CEI Oversight, FDOT | Technical Director |
| Public Information Meeting | Provide information for public outreach. Including but not limited to newsletters, press releases, website updates, community meetings, etc. | To update all public outreach initiatives. | As requested by the PIC | Status reports distributed via email, and PowerPoint presentations | Project team members | Public Information Officer |
| Quality Documentation | Issues ID, creation date, description, person responsible, status, status date | Informational –To track all issues related with the project according to the QMS. | Daily (as required) during project) | A Database will created that is accessible by all team members. The database will allow entries of quality issues to be tracked. The system will send status and updates to applicable parties. Only certain members of the QA/QC will have the ability to remove issues when complete. | Project team members including FDOT Oversight | Project Managers, Quality Manager |
| Monthly FDOT Reports | A monthly report to FDOT to include schedules and issues, and actions taken | To keep FDOT informed of all processes during the project | Monthly | E-mail/ Database | FDOT | Chief Executive Officer, |

## 9.13 CONTRACTUALLY REQUIRED MEETINGS

The Concessionaire shall anticipate periodic meetings with Department personnel and other agencies as required for resolution of design, construction, and/or operations & maintenance issues. These meetings may include:

- Partnering meetings
- Department technical issue resolution
- Design workshops
- Disputes Review Board meetings
- Permit / resource agency coordination
- Local government agency coordination
- Scoping meetings
- Progress meetings
- Utility meetings
- Drainage meetings.

During the design phase, the Concessionaire shall meet with the Department's Project Manager on a monthly basis and provide a month look ahead of the activities to be completed during the upcoming month.

During the construction phase, the Concessionaire shall meet with the Department's Project Manager on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week.

For Operations and Maintenance of the corridor, the Concessionaire shall meet with the Department's Project Manager on a monthly basis and provide planned maintenance activities and lane closure requirements for the upcoming month.

Throughout the Term, the Concessionaire shall, on a monthly basis, provide written progress reports to the Department's Project Manager that describe the items of concern and the Work performed on each task.

# 10 Interface between Construction and O&M during Commissioning

All active zones of construction will contain a General Roadway manager, Segment manager and Assistant Segment manager to oversee the construction progress. It is anticipated that there will be two roadway project managers, one from I-75 to Davie Road (Zones 1 to 6) and a second for the I-595/Turnpike and SR-7 Interchanges and Mainline Turnpike (Zones 7, 8a and 8b). In addition to these, the I-595 EXPRESS Team anticipates that several stakeholder construction managers and subconsultant managers will be on-site at the time of their respective works to ensure all designs and technical standards are met.

DUSA's Construction Manager primary responsibility is to communicate to the entire I-595 EXPRESS LLC Team, FDOT and other stakeholders the on-going status of the Project and to keep them abreast of any raising issues in whatever capacity necessary. Using procedural meetings and formal communication documents, O&M staff will be briefed well before commissioning to allow their input into the final constructed product. These pre-commission efforts are intended to facilitate a quick and problem-free handoff from construction to O&M, building consensus on acceptability of completed work.

During the formal commissioning process, it is anticipated that the Project will undergo several stages of completion. Prior to initiation, each item for commissioning will be tested to the standards as set forth in the Contract. These stages can be summarized as follows (at a minimum):

- Sub-surface completion (activated new and relocated utilities, electrical and ITS)
- Phase completion (opening of completed lanes, ramps and bridges)
- Zone completion (opening of the completed zone)
- ITS & Tolling Infrastructure completion (ITS Functionality and Tolling Infrastructure availability)

In addition, and as part of the I-595 EXPRESS LLC's Quality Control on DUSA, I-595 EXPRESS LLC will monitor specific elements of the infrastructure to avoid built-in Maintenance Rating Program (MRP) failures. The details of these pre-commissioning inspections are provided the Preliminary Quality Plan.

## CONSTRUCTION MANAGEMENT INTERFACE WITH O & M

A detailed Work Program for O & M Work is outlined in Appendix 11.10 of this document. As well O & M Manuals have been drafted to support all maintenance and operations activities.

Both I-595 EXPRESS LLC and the DUSA have signed and will implement an Interface Agreement during the construction portion of the project. I-595 EXPRESS LLC will maintain all aspects of the project corridor that are not currently under construction. Once the DUSA starts construction on a construction work zone of the project corridor they will immediately take responsibility of all maintenance activities in that segment that might be affected by construction works. Within the agreement, the DUSA is responsible for any defect caused by or during construction of a segment. If the DUSA intentionally or inadvertently causes damage or defect to an element the DUSA will be responsible for its maintenance and rehabilitation. The DUSA will be responsible for the items agreed upon between the DUSA and I-595 EXPRESS LLC in tables 4.1 A and 4.1 B of Vol. II, Div. II Section 4 of the Contract Documents.

This interface agreement between I-595 EXPRESS LLC and the DUSA will act as a clear and concise guideline for every maintenance requirement in the Concession Agreement during construction. Any maintenance issue during construction will have a clear level of ownership and accountability backed by the signed agreement

between the two parties. Dragados USA will be responsible for Self Monitoring and Availability Faults when performing required Maintenance within a construction zone.

# 11 Appendices

11.1 I-595 EXPRESS LLC ORGANIZATION CHART (DURING CONSTRUCTION)

11.2 JORGENSEN CONTRACT SERVICES ORGANIZATION CHART (FIRST 3 YEARS OF CONSTRUCTION)

11.3 CONCESSIONAIRE'S CEI: HNTB. ORGANIZATION CHART

11.4 DUSA ORGANIZATION CHART & ATTACHMENT

11.5 AE ORGANIZATION CHART

11.6 AE PROJECT WORK PLAN

11.7 CONSTRUCTION COMMUNICATION PROTOCOL

11.8 CEI PROCEDURES

11.9 CEI PROCESSES

11.10 O & M WORK PROGRAM

11.11 DUSA PROJECT SCHEDULE SUMMARY

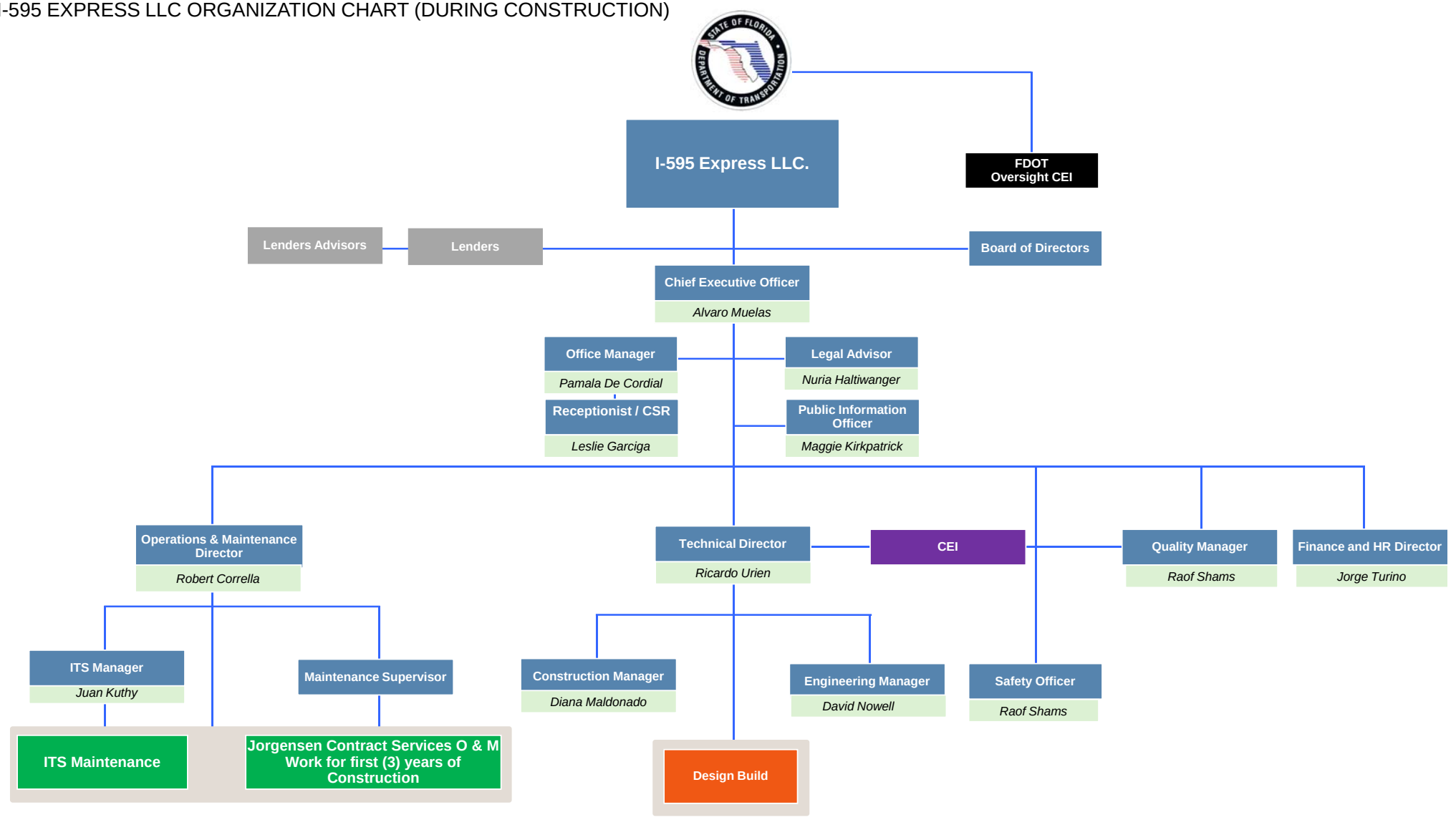
11.12 DBE UTILIZATION PLAN

**Appendix 11.1**

I-595 EXPRESS LLC ORGANIZATION CHART (DURING CONSTRUCTION)

**Appendix 11.1**

I-595 EXPRESS LLC ORGANIZATION CHART (DURING CONSTRUCTION)

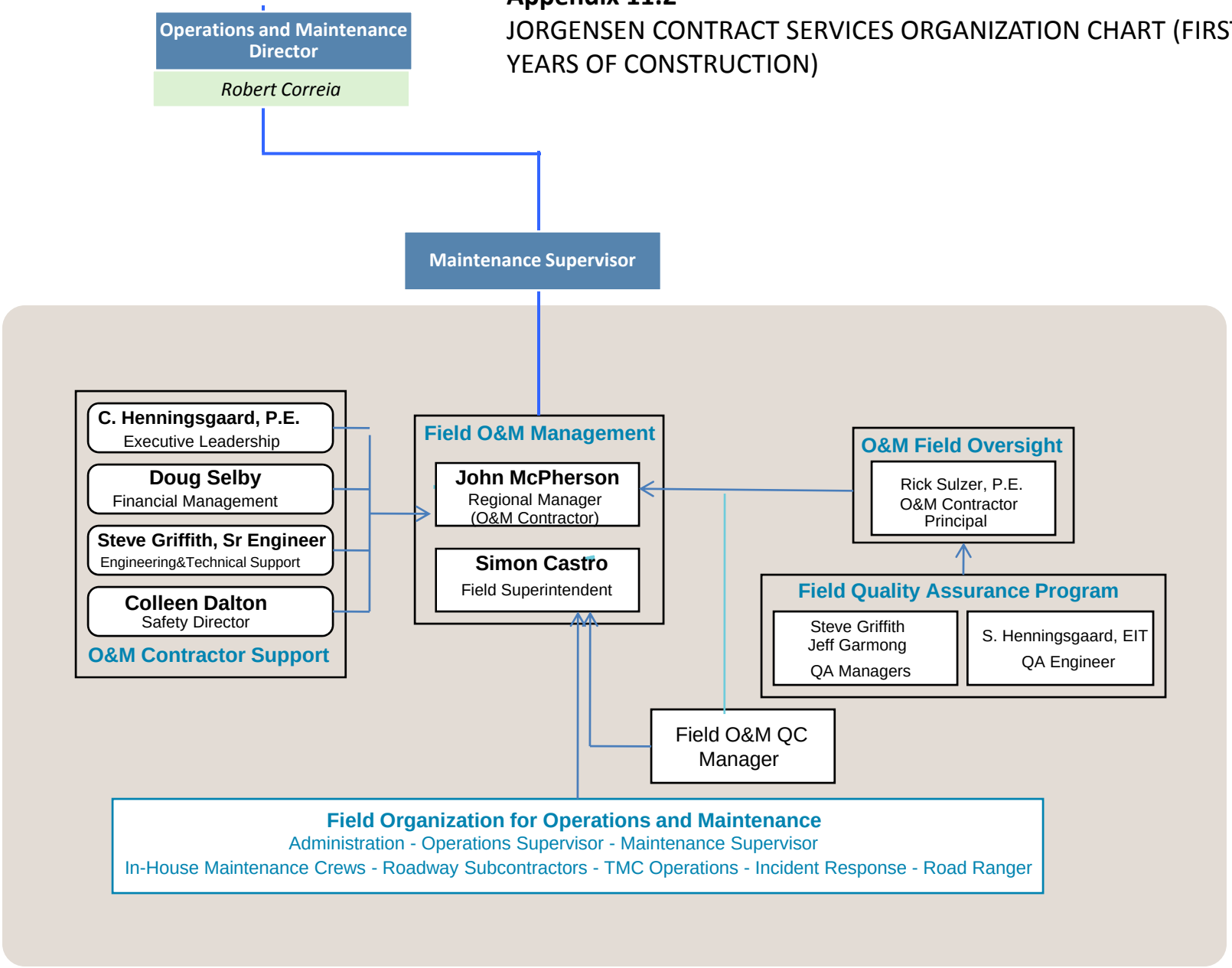


## Appendix 11.2

JORGENSEN CONTRACT SERVICES ORGANIZATION CHART (FIRST 3 YEARS OF CONSTRUCTION)

**Appendix 11.2**

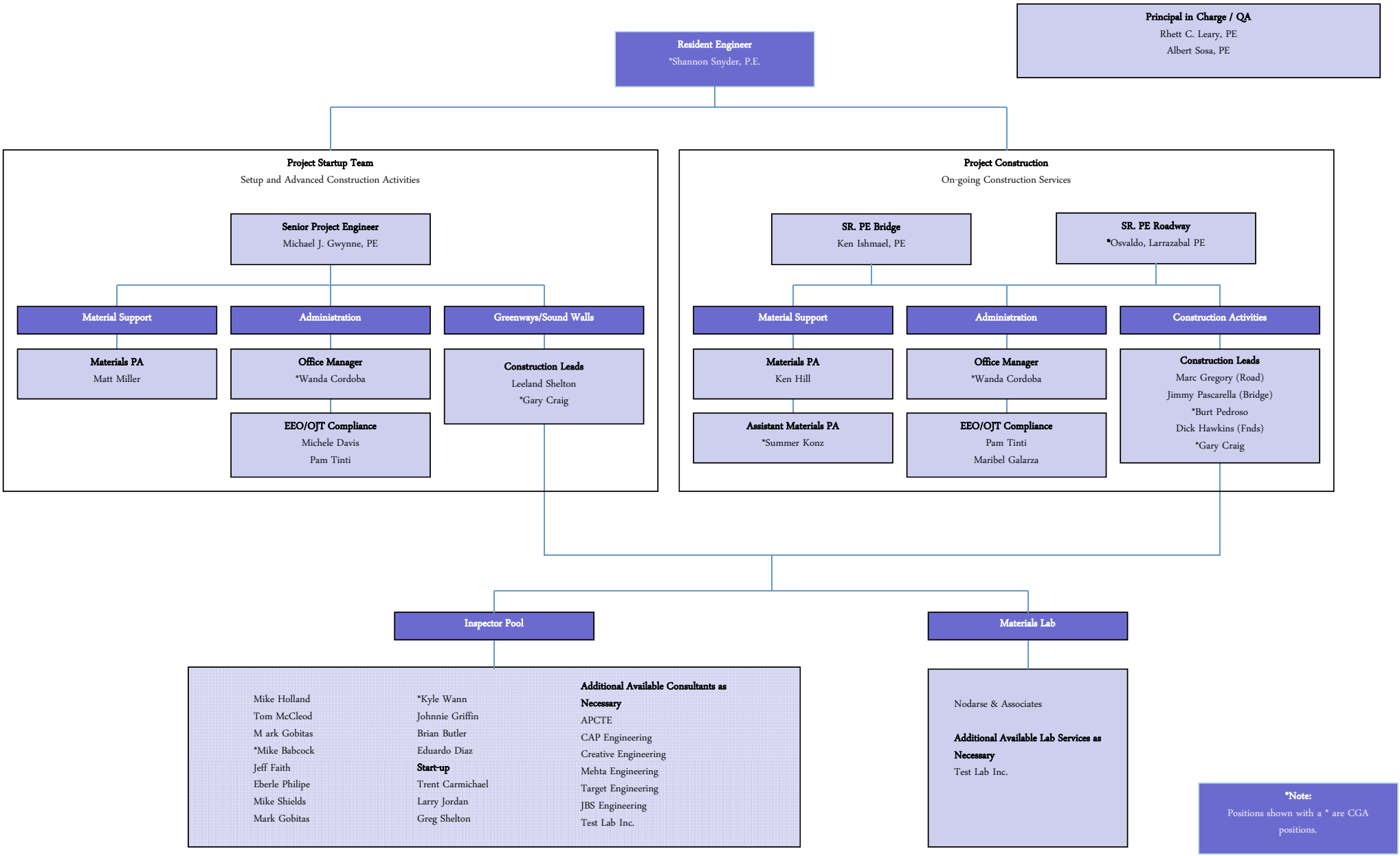
JORGENSEN CONTRACT SERVICES ORGANIZATION CHART (FIRST 3 YEARS OF CONSTRUCTION)



# Appendix 11.3

CONCESSIONAIRE'S CEI: HNTB. ORGANIZATION CHART

# Organizational Chart

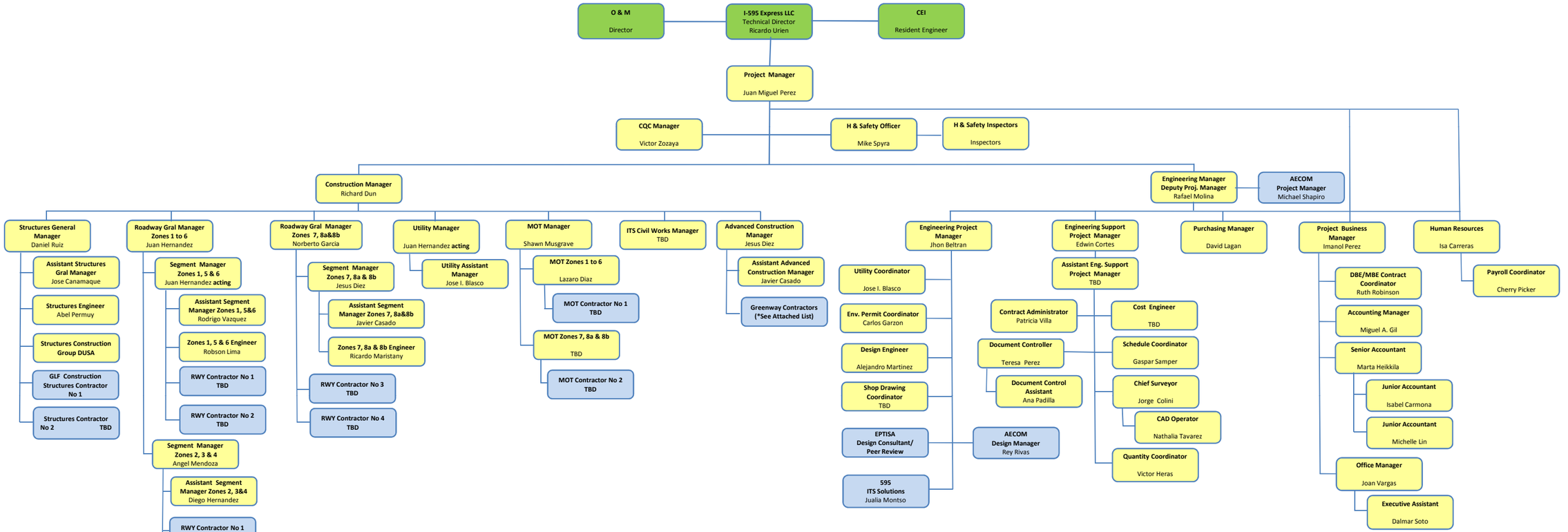


**Appendix 11.4**

DUSA ORGANIZATION CHART & ATTACHMENT

# I-595 CORRIDOR ROADWAY IMPROVEMENT PROJECT

## DRAGADOS-USA CONSTRUCTION ORGANIZATION CHART




*** See Attached List of Subcontractors**

**DRAGADOS-USA**

**CONTRACTORS**

**DATE: JUL 14, 2009**

# CURRENT SUBCONTRACTORS LIST

| NAME | OPERATION ACTIVITY | AWARDED | AGREEMENT SENT | AGREEMENT EXCECUTED |
|---|---|---|---|---|
| GLF Construction Corp. | Bridge Structures | √ | √ | √ |
| Kailas Contractors | Greenway path Subcontractor | √ | √ | √ |
| Anzac Contractors,Inc | Greenway Bridges installations (201, 202, 203, 206, 207) | √ | √ | |
| Contech Construction Product, Inc | Pedestrian Bridges Fabrication | √ | √ | √ |
| Duratek Precast Technologies | Sound Barrier Walls fabrication and installations | √ | | |
| Mactec engineering and consulting | Construction Quality Control | √ | √ | √ |
| API Graphics, Inc. | Aerial Photography | √ | √ | √ |
| Survey Plus Corp. | Survey Materials | √ | √ | √ |
| MOTPlans, Inc. | Greenway MOT | √ | √ | √ |
| Guaranteed Fence | Greenway Fence & Railing | √ | √ | √ |
| CDB LLC | Seismograph | √ | √ | √ |
| HLCM Group | Trimble System | √ | √ | √ |
| Ritz Safety | Safety Items | √ | | |

# Appendix 11.5

AE ORGANIZATION CHART

**Appendix 11.5 ET Organization Chart (Design)**
**I-595 Corridor Roadway Improvements**
**FM No. 420890-3-52-01**
**Project No. 111 074**
**Organization Chart**
**Design Team**

**Companies Legend**

| | |
|---|---|
| AECOM | AECOM |
| MACTEC | MACTEC Engineering & Consulting, Inc. |
| G&O | Greenhorn & O'Mara, Inc. |
| KHA | Kimley-Horn and Associates, Inc. |
| FRA | F.R. Aleman & Associates, Inc. |
| C3TS | C3TS, P.A. |
| C&R | Curtis & Rogers Design Studio, Inc. |
| RJB | R. J. Behar & Company, Inc. |
| BHA | Beiswenger, Hoch and Associates, Inc. |
| HBC | HBC Engineering Company |
| BP | Bolton Perez & Associates |
| CECOS | Cyriacks Environmental Consulting Services, Inc. |

* Registered in state other than Florida

**Dragados USA**

**AECOM Executive Committee**
Joe Pulicare, Officer in Charge
Bob Swanagon, Project Executive
Bruce Moulds, Operations Manager

**AECOM Project Manager**
Michael Shapiro (AECOM)

**Quality Manager**
*Buddy Hudson (AECOM)*

**Project Quality Representative**
Robert Burghardt, RA (AECOM)

**Safety**
Herold Hannah (AECOM)

**Admin/Communications**
Yvette Guerrero (AECOM)

**Engineering Project Manager**
Jhon Beltran

**Design Manager**
Rey Rivas, PE (AECOM)

**Lead Engineer**
Wally Jordan, PE (AECOM)

**Independent Peer Review Category 2 Bridges**
Craig Finley, Jr., PE (FIN)
Jerry Pfuntner, PE (FIN)

**CADD Manager**
Scott Dixon (AECOM)

**Interdisciplinary Lead**
Bayo Coker, PE (HBC)

**Structures Discipline Lead**
Saul Perez, PE (AECOM)

**Deputy Structures Lead**
Greg Dover, PE (AECOM)

**Roadway Discipline Lead**
Gorky Charpentier, PE (AECOM)

**Deputy Roadway Lead**
Chris Baker (AECOM)

**Submittal Coordinator**
Matthew Gans (AECOM)

**Plans Review**
Jorge Narino (AECOM)
Ed Hinte, PE (AECOM)

**Project Services**

**Geotechnical**
*Angela Alba, PE (MACTEC)*
Thomas McDaniel, PE (MACTEC)
Bon Lien, PhD, PE (MACTEC)
Stephanie Steser, PE (MACTEC)

**Pavement Design**
*Charles Nunoo, Phd., PE (C3TS)*
Baltar Execus, EI (C3TS)
David Chang (C3TS)
Katherine Keegan (AECOM)

**Utility Coordination**
*Pedro Ugas (C3TS)*
Dave Clarke, PE (C3TS)

**Utility Design**
*Dave Clarke P.E (C3TS)*
Ed Dvorak, PE (C3TS)
Daniel Grandal, P.E. (C3TS)
Raul Slazar, EI (C3TS)
Arian Pelaez (C3TS)

**Safety/Fire**
Ed Dvorak, PE (C3TS)

**SUE**
**John Adler (G&O)**
Dennis Stanton (FRA)

**Environmental/Permitting**
*Steve Duda (AECOM)*
Leslie Howard (AECOM)
Cynthia Harris (AECOM)
Wendy Cyriacks (CECOS)
Gayle Stone (CECOS)

**Noise Analysis**
*Eddy Lobdell (AECOM)*

**Drainage & Hydraulics**
*Eduardo Curiel, PE (AECOM)*
Juan Vasquez, PE (RJB)
Hans Murzi, PE (AECOM)
JP Minois, PE (AECOM)
Amy Schell, PE (AECOM)
Carmen Aponte, MSCEI (RJB)
Javier Rodriguez (RJB)
Paola Riveros. EI (RJB)
Sandra Sequeira, EI (RJB)

**Landscape/ Aesthetics**
*Jean Lee (C&R)*
Ben Green (C&R)
Aida Curtis (C&R)

**Lighting**
*Mo. Gopalakrishna, PE (KHA)*
Mo Gopalakrishna (KHA)
Mike Davis (KHA)

**Surveying & Mapping**
*Thuy Truong (G&O)*
John Adler (G&O)

**Traffic/ITS**
Vivek Reddy, PE (AECOM)

**MOT/TCP**
*Robert Woods, PE (AECOM)*
*Delmar Dominguez (BP)*

**Traffic Modeling**
*Vivek Reddy, PE (AECOM)*
Dennis Flynn (AECOM)
Susan Hirl (AECOM)

**Signing/Striping**
*Steve Boylan, PE (AECOM)*
Alison Hargerty (AECOM)
Don Brown (AECOM)

**Traffic Signalization**
*Carlos Mazorra (RJB)*
Paola Cardinas (RJB)

**ITS Infrastructure**
*Mike Yazdani, PE (FRA)*
Amazia Kibiko, PE (FRA)

**Advance Design Packages**

**Greenway Bridges**
*Mark Pearson, PE*
Jingsong Liu, Phd. (AECOM)
Scott Strednak (AECOM)

**Sound Walls**
*Charles Gonzalez, PE*
Teresa Rodriguez (AECOM)
Luis Lozano (AECOM)

**AECOM-B01**
*Jorge Soto, PE (AECOM)*
Pericles Natera, PE (AECOM)
Jeff Wilshire (AECOM)
Sergio Sagrera (AECOM)
Teresa Rodriquez, EI (AECOM)
Jesse Richterkessing, PE (AECOM)
Luis Lozano (AECOM)
Mark Campos, PE (BP)

**KHA-B05**
*Tom Farnan, PE (KHA)*
Anthony Bevilacqua, PE (KHA)
Robert Smith, PE (KHA)
Jamea Long, PE (KHA)

**G&O-B06**
*Simon Simon, PE (G&O)*
Tom LaSalle, PE (G&O)
Jack Gabriel, PE (G&O)
Greg Fahrendorf (G&O)

**AECOM-B02**
*Mark Pearson, PE (AECOM)*
Jingsong Liu, Phd. (AECOM)
Scott Strednak (AECOM)
Casey Morrison (AECOM)
David Sokol (AECOM)

**BHA –B08**
*Manuel Sanchez, PE (BHA)*
Soheila Sadough, PE (BHA)
Danish Dagly, PE (BHA)
Delio Perez, PE (BHA)
Juan Chaparro (BHA)

**AECOM-B03**
*Dave LeBlanc (AECOM)*
Selva Balasundaram (AECOM)
Taining Sun (AECOM)
Kris Mrmigas (AECOM)
Phillip Hutchins (AECOM)
Chris Suddard (AECOM)

**A – B09**
**Walls & Misc Structures**
*Charles Gonzales, PE (AECOM)*
Chris Whitfield (AECOM)
James McNabb (AECOM)
Mike Belisle (AECOM)

**AECOM-B04**
*Sam Malek (AECOM)*
John Pucchio (AECOM)
Matt Murphy (AECOM)
Chris Loader (AECOM)
John Ignacio (AECOM)
Derek Surgeoner (AECOM)

**Advance Design Packages**

**Greenway**
*Adriano Foti, PE (AECOM)*
Maher Maaliki, PE (AECOM)
Johanna Gonzalez, EI (AECOM)

**BHA – R01 Zones 1 & 2**
*Guillermo Becerra, PE* (BHA)*
Joseph Rojas, PE (BHA)
Bob Filisch, PE (BHA
Manuel Vega, PE (BHA)
Victor Choy, PE (BHA)

**AECOM – R02 Zone 3**
*Maher Maaliki, PE*
Maher Maaliki, PE (AECOM)
Johanna Gonzalez, EI (AECOM)
Dima Mircheva (AECOM)
Hiren Shah (AECOM)
Alex Gorgas, (AECOM)

**C3TS - R03 Zone 4**
*Roberto Carballo, PE (C3TS)*
Luis Lazo, P.E. (C3TS)
Geofrey Lamptey, PE (C3TS)
Oscar Oliva, EI (C3TS)
Omar Roman (C3TS)

**G&O–R05 Zone 6**
*Martin Marquez, PE (G&O)*
Marty Workman (G&O)
Jimmy Regis, EI (G&O)

**KHA- R04 Zone 5**
*Murray Thornburg, PE (KHA)*
Ramon Breton, PE (KHA)
Harry Bierly (KHA)
Jim Vomacka (KHA)
Majharul Alam, PE (KHA)
Jose Castaneda, PE (KHA)

**AECOM – R07 Zone 8a & 8b**
*Adriano Foti, PE (AECOM)*
Jose Cabrera (AECOM)
Don Brown (AECOM)
Patricia Morris (AECOM)
Gerry Marquez, PE (AECOM)
Mike Couch (RJB)

**AECOM – R06 Zone 7**
*Kevin Haughey, PE* (AECOM)*
Tom Shearin (AECOM)
Neil Sean (AECOM)
Dough White (AECOM)
Herbert Ridgeway (AECOM)
Paul Schrum (AECOM)

**Project Controls Manager**
Libertad Vargas (AECOM)

**PCA**
Diana Rubio (AECOM)

**Schedule**
Wilson Leon (AECOM)
Robert Vangundy (AECOM)

**Document Control**
Dalia Leiva (AECOM)

**Construction Support Services**

**Post-Design Services**
Greg Dover, PE (AECOM)
Matthew Gans (AECOM)

**As-Built Drawings**
Greg Dover, PE (AECOM)
Teresa Rodriguez (AECOM)
Scott Dixon (AECOM)
Luis Lozano (AECOM)

Date: 14 July 2009

**Appendix 11.6**

AE PROJECT WORK PLAN

# I - 595
## CORRIDOR ROADWAY IMPROVEMENTS PROJECT

# Project Work Plan

AECOM

_____ Date:
Jiri Filipovic, Project Manager

_____ Date:
Bruce Moulds, PPP Managing Director

NOTICE

## LIST OF ACRONYMS

| | |
| --- | --- |
| HASP | Health and Safety Plan |
| PM | Project Manager |
| DM | Design Manager |
| DL | Discipline Lead |
| DA | Design Agreement |
| DUSA | Dragados-USA |
| TL | Task Lead |
| PMO | Project Management Office |
| IE | Independent Engineer |
| MOU | Memorandum of Understanding |
| NTP | Notice to Proceed |
| QA | Quality Assurance |
| QC | Quality Control |
| VE | Value Engineering |
| WBS | Work Breakdown Structure |
| I - 595 | Interstate 595 |
| CMP | Corridor Master Plan |
| FDOT | Florida Department of Transportation |
| CA | Concession Agreement |
| PWP | Project Work Plan |

Section Description Page(s)

## Revision History

| Revision | Purpose | Effective Date |
| --- | --- | --- |
| | Draft for review – not for use | January 16, 2009 |
| | Draft for review – not for use | February 21, 2009 |
| 0 | Issue for use | March 5, 2009 |
| 1 | Update - general update | June 19, 2009 |
| 2 | Update - general update | July 14, 2009 |

## 1.0 PURPOSE

The purpose of this Project Work Plan is to establish the plan of execution by AECOM and its subconsultants to efficiently develop and complete Final Corridor Master Plan (FCMP), final designs and tender documents, and post design services for the improvements and re-construction of I-595.

This plan defines the scope, time, management of and approach to the project, organization, project controls and integrations, safety and health, quality program, communication, change controls, project risks and the responsibility for developing the preliminary and final design products, as well as accounting procedures and project closeout procedures. This plan will be updated as needed and distributed to all project team members.

## 2.0 DESCRIPTION OF PROJECT

### 2.1 Project Overview

**Project Name:** I - 595 Roadway Corridor Improvements

**Client Project Manager:** Juan Miguel Perez Rodriguez

**Location:** 10368 State Road 84, Suite 201, Davie, FL 33355

### 2.2 Project History

AECOM signed the Design Agreement with Dragados USA on December 19, 2008. Dragados USA signed Design-Build Agreement with I-595 Express (Concessionaire) on March 3, 2009, and I-595 Express executed the Concession Agreement (CA) with The State of Florida on March 3, 2009.

### 2.3 Project Confidentiality

It is extremely important that work developed during this project remain strictly confidential within the project team. It is a contractual obligation to maintain confidentially at all times, as outlined in the design Agreement. Our Team is a private entity with the ability to hold our products as intellectual property. The Team must ensure that data is not released to any other entity without instruction from and/or approval by Dragados.

### 2.4 Major Phases on I-595:

This project will have three distinct phases:

1. Corridor Master Plan (CMP) - finalization of preliminary engineering design and associated Master Plans/Reports (structural, drainage, utility adjustments, signing, environmental etc.) during a four-month period. The CMP was largely completed during the preparation of the proposal. Preliminary input data have been used (survey, geotechnical) for the development. This phase includes mobilization tasks (e.g. project set up, budgeting, staffing, training, quality management system, etc.); and

2. Final Design - all detail design services (using approved CMP as a base) to provide drawings, tender quantities and documents to be issued for construction within the next fourteen months after CMP completion and approval.

3. Construction Support Services – our team will provide post design services by providing three professionals performing field monitoring for the duration of construction. This phase includes As-built drawings and shop drawing review, and geotechnical services (post-design testing and field inspection).

### 2.5 Scope of Work

The design and construction activities of the Project generally consist of 11 miles of reconstruction, widening, milling and resurfacing of the I-595 mainline, 2 miles of the Florida Turnpike and all associated improvements from the I-75/Sawgrass Expressway interchange west of SW 136th Avenue to the I-595/I-95 interchange, which includes the following main components:

- Reconstruction, widening, milling and resurfacing of the I-595 mainline.
- Modification and construction of auxiliary lanes, braided ramps, crossroad bypasses and various geometric improvements to eliminate operational deficiencies caused by merge, diverge and weaving segments along the corridor.
- Reconstruction, widening, milling and resurfacing and providing a continuous connection of the EB and WB SR-84 frontage road system.
- Construction of three reversible Express Lanes in the median serving express traffic to/from I-75/Sawgrass Expressway from/to east of SR-7 with a direct connection to the Florida's Turnpike.
- Geometric improvements to the I-595/Florida's Turnpike interchange and widening / reconstruction of the Florida's Turnpike mainline from north of Griffin Road to south of Peters Road to integrate the Express Lanes direct connections.
- Deployment of various Intelligent Transportation System (ITS) elements for the Express Lanes and general purpose lanes along both I-595, Florida's Turnpike, SR-84 and associated ramps.
- Preservation of an envelope within the right of way that would accommodate construction of a future transit system.
- Construction of portions of the Broward County Greenways System plan from just east of SW 136th Avenue to east of the SR-7/US 441 interchange with I-595.
- Other improvements including construction of sound barriers, bridge works, drainage, utility relocations, signing and pavement markings, signalization, lighting, landscaping, etc.
- Additional Right-of-Way West of Turnpike.

## 3.0 PROJECT APPROACH

### 3.1 General

This is a design-build project and will require a different approach than for conventional projects. It will be intensive, with compressed schedule where design and construction activities will overlap, potential scope changes, tight budget (lump sum) and a private entity as a client; and will require coordination of many AECOM offices and subconsultants during the design efforts. All personnel must be responsive, work cooperatively, communicate frequently, and act immediately if potential problems arise.

## 3.2 Overall Project Management

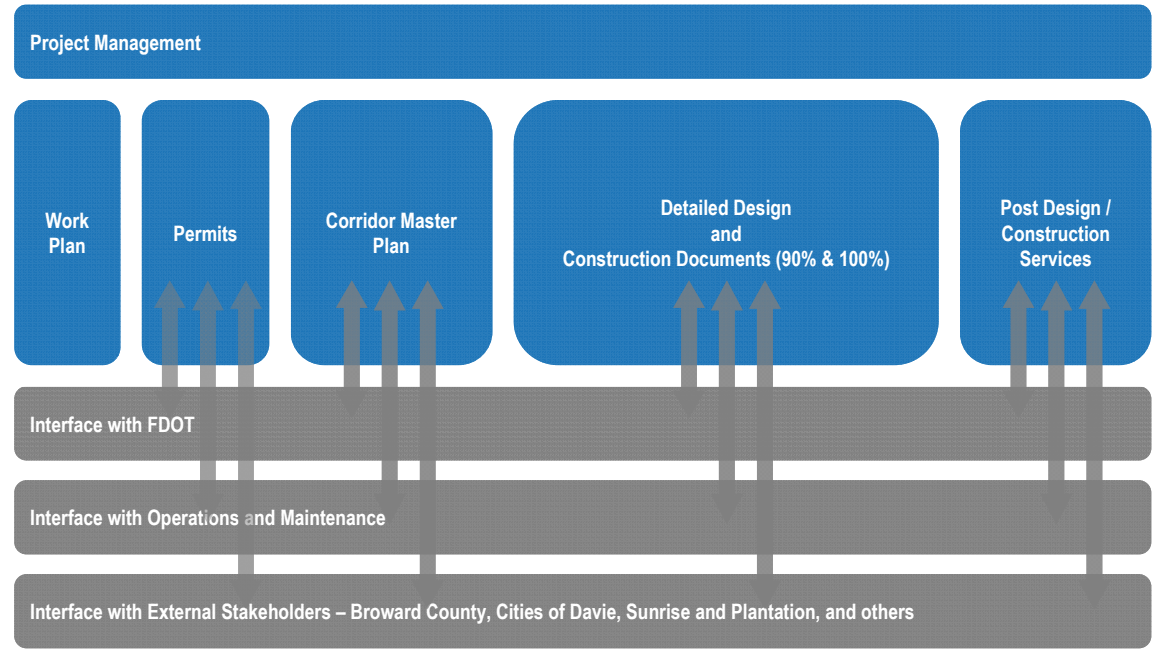
### 3.2.1 General Design Approach

The overall philosophy for this project involves a team approach. The main management tool includes the establishment of design management office headed by AECOM project manager and with skilled professionals as Discipline Leads ensuring multiple links between other AECOM offices and subconsultant team members. Refer to organization chart in Exhibit A.

One of the project management tools that will be used for this project is the use and maintenance of a web-based file sharing and collaboration system, called SharePoint. The main purpose of this is to serve a s file repository is to allow sharing and tracking of information in a near real time basis for team members.

The framework of the Project Work Plan flow is illustrated in Figure 3.1 identifying key tasks within each work plan phase and grouped by major components.

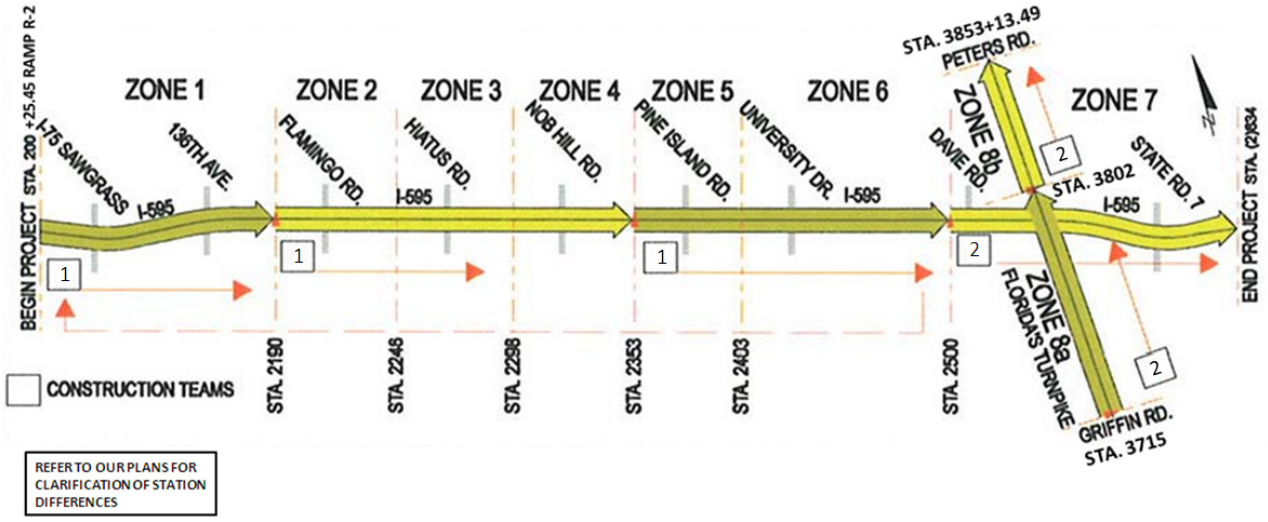
*Figure 3.1 – Project Work Plan Flow*




During design mobilization, emphasis will be on early start of "Input" disciplines – survey, geotechnical investigations, utility locates/relocation and Permitting. Their work will be scheduled to match the timing and objectives of the construction packages outlined below.

The project has been divided into nine "Zones" and six "Construction Teams" as described and depicted in Figure 3.2 below. The design approach that will be taken is that design activities will be organized and progressed to facilitate the established sequence of construction.

Figure 3.2




The construction teams will be as follows:

- Team 1 – Zones 1-6
- Team 2 – Zones 7 and 8
- Team 3 – Structures
- Team 4 – MOT
- Team 5 – Utilities
- Team 6 – ITS

Construction teams 3 - 6 are corridor-wide teams.

As on any other roadway project, roadway and bridge disciplines provide the backbone of design. As shown in the Org Chart (Exhibit A), one roadway design team will be assigned to one or two zones, depending on the length of the zone and size of the team.

For bridge teams, the geographic zones will be taken into consideration for a team but expertise for a particular type of bridge and schedule sequence of Zone design (e.g. it's undesirable to assign all bridges in "early" Zone to same team) will take precedence in some cases. Refer to Section 4.1 below for work assignments.

The number and composition of teams in the Organization Chart shown in Exhibit A, consisting of AECOM and subconsultant staff, corresponds to the statement above. Each roadway and bridge team will generally consist of three to five personnel lead by a Team/Task Lead. They will be supported by other Design Services teams. These teams will provide the required input to each Zone Task Lead as required and in

conjunction with the Discipline Leads. The Roadway Task Lead will also be the Zone Lead responsible for the overall submittal package assembly.

Continuity and design consistency within each Zone will be provided by the leadership of the Discipline Leads and the Design Manager. All reporting relationships and roles are clearly identified in the Organization Chart in Exhibit A.

**Responsibilities of the Design Service providers include:**

- Reporting and Communication with the DM
- Keeping track of inputs and outputs, and design changes within their discipline
- Review data collection needs with Discipline Leads and Task Leads and provide a list of required information
- Timely communication of new information to/from the DM, DLs and TLs
- Spot check verification and written 'sign-off' on milestone submittals within respective discipline
- Assisting DM in communicating with Dragados counterparts as necessary
- Assisting DM in obtaining approvals
- Preparing technical letters/responses to Dragados/I-595 Express LLC/FDOT for DM
- Bringing changes to the attention of the DM
- Regular weekly progress meetings/conference calls with Segment Designers
- Clear direction and advice to TLs within their respective discipline
- Review deliverables prior to Internal Review Meeting(s)
- Schedule and budget for respective disciplines

**Measurements of Productivity:**

- Maintain discipline schedule (ensure timely input to dependent disciplines)
- Track submittal dates of deliverables
- Maintain discipline budget
- Meet Team's expectations
- Meet contract obligations
- Meet STC and AIT/IE expectations
- No safety issues

**Following Reviews and Audits will be conducted:**

- Management Reviews
- Internal Audits
- Dragados Reviews
- FDOT Reviews

**Expected Design Documents and Reviews:**

- Minutes of Meetings (Task Forces)
- Minutes of Meetings (Design Coordination)
- Minutes of other Meetings
- 60% Design Review Submittal to Dragados
- 60% Design Review comments from Dragados
- 90% Design Submittal to Dragados

- 90% Design Submittal to Peer Design Review (Category 2 bridges only)
- 90% Review Comments from Dragados
- 90% Design Submittal to FDOT
- 90% Design review comments from FDOT
- 100% Submittal to Dragados and FDOT
- Released For Construction
- Changes During Construction
- Construction Reports (As-Built)
- Permits
- Various Reports (Geotechnical , Hydraulics, Pavement etc.)

### 3.2.2 Design Coordination Meetings

The purpose of design coordination meetings will be to coordinate work activities, identify problems, develop solutions and provide uniform instructions. The agenda will include a progress schedule, safety, quality, workforce productivity, compliance with project goals, and budget.

The design process will be 'vertically integrated' to ensure that relevant information to and from an end user is properly, timely and efficiently conveyed. This will be achieved through regular meetings as follows:

**AECOM Internal Meetings** (only AECOM and Subconsultants)

**a) Interdisciplinary Coordination Meetings**

- Frequency: weekly
- Participants: chaired by Design Manager with Discipline Leads and Project Manager
- Purpose: coordination among disciplines to ensure timely input and sequence of design activities, progress, discussion about and resolution to contentious issues and schedule.

**b) Discipline Coordination Meetings**

- Frequency: weekly
- Participants: chaired by the Discipline Lead with Task Leads of a particular discipline, e.g. roadways. Other disciplines may be invited as required.
- Purpose: to coordinate with all Task Leads to ensure consistency of design among all design (task) teams, convey information from Interdisciplinary Coordination Meetings (technical, progress, schedule, issues etc) bring up issues/information for Discipline Coordination Meetings.

**c) Task Team**

- Frequency: weekly
- Participants: design (task) team chaired by the Task Lead.
- Purpose: to coordinate design team, convey information to and from Discipline Coordination Meetings, 1st level of issues resolution.

**External (Task Force) Meetings**

To facilitate proper flow of information to and from the Construction Team, Task Force Meetings will be utilized. These Task Force Meetings between Dragados and AECOM may include I-595 Express and

FDOT staff either as required or, if agreed by all parties, regularly. FDOT personnel includes RS&H, URS and others retained by FDOT. Participation of I-595 Express and FDOT personnel will provide much needed interaction and forum for specific item resolution, direction and approach to dealing with other agencies etc; awareness of design progress and design and construction schedule. This should in turn prevent surprises at 90% submittals for FDOT reviews and facilitate timely review completion and consequently release of construction drawings.

To provide targeted and focused communication flow, External Meetings are planned as follows:

**a) Joint Management Meetings**

- Frequency: monthly
- Participants: chaired by Dragados Project Manager with Dragados Engineering Project Manager and Dragados Support Engineering Project Manager, and Dragados Design Peer Review Consultant (Eptisa), I-595 Express LLC personnel, FDOT Project Manager and selected FDOT personnel and AECOM Project and Design Managers.
- Purpose: to provide a bigger picture of design activities, overall progress and schedule, discussion and resolution of outstanding/contentious items and to address any administrative items.

**b) Discipline Task Force Meetings**

It is expected that regular and 'as required' discipline task force meetings/workshops will be required. It is anticipated that specific personnel from Dragados, I-595 Express, FDOT and AECOM will attend to address specific issues. Following Task Force Meetings have been planned/are ongoing:

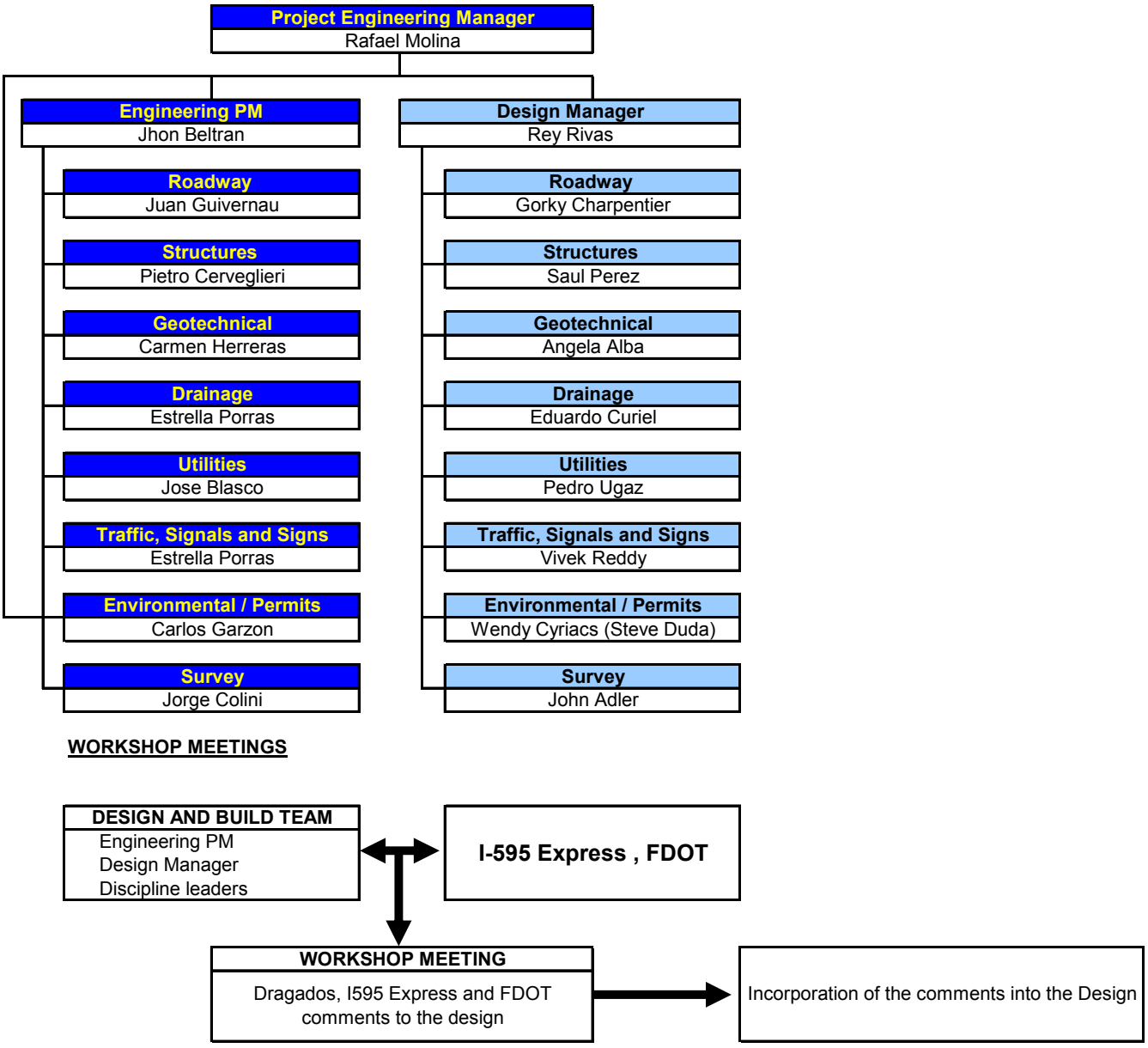
- Roadways
- Bridges
- Permitting
- Utilities
- Drainage
- MOT

Other Task Force Meetings will be convened on as required basis, and may include: Landscaping and Aesthetics and ITS.

The above noted meetings will be supplementary to ongoing continuous communications between design, construction and FDOT.

Figure 3.3 depicts interface between design and construction discipline counterparts and shows the benefit of having FDOT involvement.

Figure 3.3




### 3.2.3 Design Package Submittals

As noted above, design will accommodate planned construction starts. It is planned that component design package submittals in each of the nine zones will be provided to the six construction teams. Refer to Exhibits C, C1 and C2 for details.

Apart from the component submittals, advanced stand-alone construction submittal packages for prioritized work will be provided.

Excluding the Advanced Design Package submittals, no other early design packages may be released to construction prior to the submittal and approval of the Corridor Master Plan (CMP).

To summarize, the submittals will be as follows:

- Corridor Master Plan – two submittals to FDOT are expected (Final for Review and Final with incorporated comments for Final Approval)
- Advance Design Package Submittals – 90% and 100% submittals
- Other Design Package Submittals – 90 and 100% submittals

No 30% submittals are planned.

**Corridor Master Plan**

The CMP will be one complete submittal. It will include various components which are listed in the design portion of the Project Schedule.

**Advanced Design Package Submittals**

To meet contractual obligation for Advanced Construction completion, stand-alone Advanced Design Packages will be provided as shown in Project Layout in Attachment 1, and described as follows:

**Submittal GW 001** - Greenway West construction package (from 136 to University Drive, including pedestrian bridges Nos. 000206, 000207, 000201, 000202 and 000203, and ground mounted soundwall at Hawk's Landing (SB-3)

**Submittal GW 002** - Greenway East construction package (from Sewel Lock to Marina Mile Blvd, including ground mounted sound wall SB-9)

Separate smaller design teams will provide these and any other advance packages, as shown in the organization chart in Exhibit A. Advantage will be taken from the timing of individual zone design packages enabling one team to work essentially in sequence, e.g. Greenway road and structural teams can transfer and start work on Zones 3 and 8 after Greenway final submittals.

Utility relocation design and actual relocation, and associated permitting, has to be completed/granted prior to construction activities at the utility conflict locations. Utility relocations required include:

- 4" sewer force main from the City of Sunrise

Required utility JPA packages and Permitting activities are listed in the Project Schedule under Design-Advanced Activities. These packages do not need to be submitted to FDOT.

**Other Design Package Submittals**

We plan that the design teams provide component submittal packages for each Zone, to facilitate the sequence of construction. Corridor–wide specifications package will be prepared prior to any 100% submittals.

Detailed breakdown of component design packages can be found in Exhibit C – I-595 Component Submittal Matrix Flow Chart, Exhibit C1 – I-595 Component Set Submittal Matrix and Exhibit C2 – Bridge Groups Matrix.

Exhibit C – I-595 Component Submittal Matrix Flow Chart – the exhibit depicts at glance the flow of individual component packages. The flow chart is designed to facilitate construction start dates while allowing design flexibility by providing component packages in sequence. Expected lag times between individual packages, based on construction durations, are reflected in the Project Schedule. The goal is to time the delivery of the components so that construction will never stop. This is in line with design-build philosophy and in conformance with the Technical Requirements. Included is coding and numbering for each submittal package.

Exhibit C1 – I-595 Component Set Submittal Matrix - describes the content of the various components at 60% (internal reviews only), 90% (for Dragados-USA and FDOT reviews) and Final packages. The general approach for design is to have all grading; drainage; roadway; maintenance of traffic; utility adjustments; SWPPP; Group A bridges foundation plans; wall plans; and foundation and conduits for signing, signalization, ITS and lighting in each zone ready to go out in one Release For Construction package. Construction would begin using this package. Subsequent packages would then be submitted for final signing and pavement marking, signalization plans, ITS, lighting and intersection details/ plateau; Group B bridges foundation plans; Group C bridges foundation plans; Group A bridges substructure plans; Group B and C bridges substructure plans; Group A bridges superstructure plans; Group B and C bridges superstructure plans; and final landscape plans. The Release For Construction of these subsequent packages, and the start of construction would be scheduled to follow up behind the first package in each zone.

Exhibit C2 – Bridge Groups Matrix – identifies zone and bridges belonging to the three groups.

Best example of component packages is bridges: a priority group of foundations within a zone (based on MOT phasing) will be submitted with the main package, while substructure and superstructure packages will be provided at later dates to facilitate the progress of construction activities. Follow up groups, if necessary, will be provided in subsequent packages. List of bridge grouping within each zone can be found in Exhibit C2. For smaller bridges where the construction lag between foundation and substructure and/or superstructure are short, entire bridge design packages will be provided.

The items shown in the Component Set Submittal Matrix are considered the minimum requirements for each component and will not prevent a more complete submittals if circumstances allow. Certain components in the matrix assume 14 day expedited review by FDOT to meet construction start date. Items requiring expedited reviews are reflected in the Project Schedule. However, if circumstances will require such and if agreed by Dragados-USA, component packages with lesser content may be provided. Any deviation from the shown Component Set Submittal Matrix in any submittal will be stated in detail to prevent any misunderstanding.

To meet the proposed schedule for zones 2, 5, and 7, detail design will have to proceed simultaneously with the development/finalization of the Corridor Master Plan. Risk of redesign will be mitigated by special emphasis on early finalization of these three zones within the CMP including all relevant discipline Master Plans, although as stated

above, the CMP will be submitted as one complete submittal package to FDOT. All contentious issues in these three zones must be resolved during task force meetings/workshops with Dragados/I595 Express and FDOT.

Detailed Work Breakdown Structure of the design and construction activities and actual timing and sequencing of activities and submittals can be found in the Project Schedule.

### 3.3 Work Program and Design Workbooks

For each of the major discipline of the project, a design workbook will be created to guide the discipline designs. The workbooks identify the tasks to be performed, the approach to the design element, design standards including project standard plans (PSP), design software and review requirements including design checklists.

The following workbooks will be prepared and appended to this PWP:

- Roadways
- Bridges
- Drainage
- Traffic
- Utilities
- Construction Support Services

The goal is to finalize the Workbooks within two weeks of NTP1 – March 16, 2009.

### 3.4 Development and Management of As-built Plans

As the work progressed, the Contractor will produce red-lined drawings of any changes made in the field and provide this documentation to the Designer to transfer these changes to as-built plans for its ultimate submittal to FDOT. An engineer will be assigned to lead this effort, supported by a Project Administrator, designers, CADD Technicians and our CADD Manager. The Project Administrator will keep a log of all as-built red-lines submitted by the Contractor and track each package and sheet as it is updated in CAD, back checked and QA/QC'd. As-built plans will be put through our QMS.

### 3.5 Review and Approval of Shop Drawings

A shop drawing submittal log and schedule will be furnished by the Contractor to the designer. Shop drawings from the Contractor will be submitted to the Designer and logged into the submittal log by our Engineering Clerk and then distributed to our Construction Support Services (CSS) Lead for distribution to our the proper Task Lead for their review, comments and approvals. Each drawing will be stamped and dated. Shop drawings will be put through our QMS. Once reviewed by the Task Lead, shop drawings will be returned to the CSS Lead for their review and logged by the Engineering Clerk into the submittal log and returned to the Contractor with a formal transmittal.

## 4.0 PROJECT ORGANIZATION

### 4.1 The Project Team

The Organization Chart hierarchy is included in Exhibit A. Project Contacts will be included in the I-595 SharePoint, and can be updated by all team members. Key persons (i.e. Discipline and Task Leads) will be

registered professional engineers in Florida. Some offices will be performing just one discipline, as shown below. The team efforts will be headed by a Task Leader. The intent is to accomplish the work necessary at the locations that make the most sense for each Team Member.

The participating AECOM offices will be as follows (for bridges refer to Table 1 below):

1. Project Management Office (PMO) – initially in AECOM Miami office, the PMO will be located on the project site at I-595;
2. Miami – structural design for selected structures in Zones 3, 7 and 8, roadways – Zone 3, 8a and 8b, and corridor wide environmental permitting;
3. Orlando – corridor wide signing and pavement marking, and drainage in Zones 3, 7 and 8a and 8b;
4. Jacksonville – drainage and TCP support Zone 7;
5. Raleigh – roadway and TCP Zone 7, and structural design for five Greenway bridges and selected structures in Zones 3, 7 and 8;
6. Greenville – corridor wide environmental permitting and reports;

To meet our contractual commitments from proposal stage and to address the large scope, subconsultants will participate as follows (for specific work assignments refer to Table 3 below):

1. Greenhorne & O'Mara – roadway and structural design in Zone 6, corridor wide survey and SUE;
2. Kimley Horn – roadway, drainage and structural design in Zone 5; and illumination design in Zones 1, 4, 5, 6, 7 and 8;
3. C3TS – roadway in Zone 4; and corridor wide utility and pavement design;
4. R.J. Behar – drainage in Zones 4 and 6, illumination in Zones 2 and 3, and corridor wide drainage analysis and traffic signals;
5. BHA – roadway, drainage in Zones 1 and 2, and structural design in Zones 1, 2, 4 and 6;
6. FR Aleman – corridor wide ITS infrastructure design and traffic signals and traffic analysis for lane closures;
7. Curtis and Rogers – corridor wide aesthetics and landscaping;
8. MACTEC – corridor wide drilling and testing, and geotechnical design; and post-design testing and field inspection;
9. CECOS – corridor wide environmental permitting support

As noted above, the project is divided into six Construction Teams. The corresponding design packages will be as shown in Table 1:

**Table 1**

| Zone | Construction Team | Limits | Roadway and MOT | Bridges | Drainage |
|---|---|---|---|---|---|
| 1 | 1,3,4,5 & 6 | Sta. 200 (West end of project – Sawgrass/I-75) to Sta. 2190 (East of 136 Av) | BHA | BHA, AECOM | BHA |
| 2 | 1,3,4,5 & 6 | Sta. 2190 to Sta. 2246, East of Flamingo Road | BHA | BHA, AECOM | BHA |
| 3 | 1,3,4,5 & 6 | Sta. 2246 to Sta. 2298, East of Hiatus Road | AECOM | AECOM | AECOM |
| 4 | 1,3,4,5 & 6 | Sta. 2298 to Sta. 2353, East of Nob Hill Road | C3TS | BHA | Behar |
| 5 | 1,3,4,5 & 6 | Sta. 2353 to Sta. 2403, East of Pine Island | KHA | AECOM, KHA | KHA |
| 6 | 1,3,4,5 & 6 | Sta. 2403 to Sta. 2500, East of University to Davie Road | G&O | AECOM, G&O, BHA | Behar |
| 7 | 2,3,4,5 & 6 | Sta. 2500 to Sta. 2634, Viaduct, East end of the Project | AECOM | AECOM | AECOM |
| 8a | 2,3,4,5 & 6 | NB and SB Turnpike from Griffin Road (South) to I-595 Westbound | AECOM | AECOM | AECOM |
| 8b | 2,3,4,5 & 6 | NB and SB Turnpike from I-595 Westbound to Peters Road (North) | AECOM | AECOM | AECOM |

Detailed bridge assignments for AECOM offices are shown in Table 2 below.

| Section | Scope Item | Bridge Data No. | Team Assigned |
|---|---|---|---|
| 1 | E of 136th Av. over finger canal N of NNRC | 000206 | AE-B02 |
| 1 | W of Flamingo Rd. over finger canal N of NNRC | 000207 | AE-B02 |
| 2 | W of Hiatus Rd. over the NNRC | 000201 | AE-B02 |
| 2 | E of Nob Hill Rd. over finger canal N of NNRC | 000202 | AE-B02 |
| 3 | Ramp E-2 over Ramp G (EB) - Braid | 000105 | AE-B01 |
| 3 | Ramp E-2 over Hiatus Rd. (EB) - Bypass | 000106 | AE-B04 |
| 3 | Ramp E-2 over Ramp H (EB) - Braid | 000107 | AE-B01 |
| 3 | Ramp I over Hiatus Rd. (WB) - Bypass | 000108 | AE-B04 |
| 3 | W of Pine Island Rd. over finger canal N of NNRC | 000203 | AE-B02 |
| 3 | I-595 WB over Hiatus Rd. & Exp.Lanes over Hiatus Rd. | 860370 | AE-B04 |
| 3 | I-595 EB over Hiatus Rd. | 860371 | AE-B04 |
| 3 | Hiatus Road Over NNRC | 864111 | AE-B01 |
| 5 | Ramp K-2 over Ramp M (EB) - Braid | 000111 | AE-B02 |
| 5 | Ramp L-1 over SR 84 WB (WB) - Braid | 000112 | AE-B01 |
| 5 | I-595 WB over Pine Island Rd. | 000113 | AE-B01 |
| 6 | I-595 EB over University Dr. | 000119 | AE-B02 |
| 6 | Ramp Q-3 over Ramp Q-2 (WB) - Braid | 000123 | AE-B01 |
| 7 | Ramp T-16 over North New River (WB to NB) | 000021 | AE-B02 |
| 7 | Ramp U-4 over Ramp U-3 - Braid | 000025 | AE-B02 |
| 7 | Ramp T-9 over Ramp T-15 | 000026 | AE-B05 |
| 7 | Exp. Lanes Ramp R-7 Direct Connect to TPK (W. end) | 000033 | AE-B01 |
| 7 | I-595 WB over Davie Rd. | 860378 | AE-B03 |
| 7 | I-595 EB over Davie Rd. | 860379 | AE-B03 |
| 7 | SR-84 EB over SR 7 | 860413 | AE-B05 |
| 7 | Ramp T-9 over SR 7 | 860414 | AE-B05 |
| 7 | I-595 EB over SR 7 | 860418 | AE-B03 |
| 7 | I-595 WB over SR 7 | 860419 | AE-B03 |
| 7 | SR-84 WB over SR 7 | 860420 | AE-B03 |
| 7 | Ramp U-9 over Ramps U7 | 860421 | AE-B01 |
| 7 | I-595 EB over SR-84 EB & Ramp U-11 | 860425 | AE-B03 |
| 7 | I-595 WB over SR-84 EB & Ramp U-11 | 860426 | AE-B02 |
| 7 | SR-84 WB over Ramp U-2 | 860475 | AE-B05 |
| 7 | Ramp U-5 Flyover NB SR-7 to WB | 860476 | AE-B02 |
| 7 | Ramp T-11 Flyover EB to NB SR-7 | 860477 | AE-B02 |
| 7 | Exp. Lanes Ramp R-7 Direct Connect to TPK N. | 000032A | AE-B01 |
| 8A | Ramp T-7 over Drainage Pond | 000022 | AE-B03 |
| 8A | Ramp T-5 over TPK | 000023 | AE-B01 |
| 8A | Exp. Lanes Direct Connect to TPK South (Ramp R-9) | 000031 | AE-B01 |
| 8A | Ramp T-1 over Ramp T-9 | 000125 | AE-B02 |
| 8A | FL's TPK NB Over I-595 & SR 84 | 860533 | AE-B05 |
| 8A | Ramp T-1 from SB TPK to I-595 Over TPK | 860559 | AE-B01 |
| 8A | Ramp T-9 Cellular Bridge | 860560 | AE-B02 |
| 8A | Existing Ramp T-5 Demolition | 860562 | AE-B01 |
| 8B | Exp. Lanes Ramp R-7 Direct Connect to TPK N. | 000032B | AE-B01 |

| Legend | | |
|---|---|---|
| | AECOM Team 1 | AE-B01 |
| | AECOM Team 2 | AE-B02 |
| | AECOM Team 3 | AE-B03 |
| | AECOM Team 4 | AE-B04 |
| | AECOM Team 5 | AE-B05 |

Subconsultant Overall Work Assignments are shown in Table 3 below.

**Table 3**

| Zone | Scope Item | Bridge Data No. |
|---|---|---|
| **Greenhorne & O'Mara** | | |
| 6 | Roadway Design Zone 6 | |
| | Express 2403 to 2500 zone 6 | |
| | I595 EB 2403 to 2500 zone 6 | |
| | I595 WB 2403 to 2500 zone 6 | |
| | SR84 EB 3403 to 3510 zone 6 | |
| | SR84 WB 1403 to 1500 zone 6 | |
| | Ramp N EB directional at University zone 6 | |
| | Ramp O EB west of University zone 6 | |
| | Ramp P-1 WB directional at University zone 6 | |
| | Ramp P-2 EB east of University zone 6 | |
| | Ramp P-3 EB east of University zone 6 | |
| | Ramp Q-1 WB Off at University zone 6 | |
| | Ramp Q-2 WB west of Davie zone 6 | |
| | Ramp Q-3 WB west of Davie zone 6 | |
| 6 | Ramp Q-1 to SR 84 WB over University | 000116 |
| 6 | Ramp N over I-595 (Formerly Ramp C) | 860390 |
| 6 | Ramp P-2 over Ramp P-3 (EB) - Braid | 000122 |
| 1 thru 8 | Corridor Wide Engineering Survey & SUE | |
| | | |
| **Kimley Horn** | | |
| 5 | Roadway Design Zone 5 | |
| | Express 2353 to 2403 zone 5 | |
| | I595 EB 2354 to 2403 zone 5 | |
| | I595 WB 4353 to 4403 zone 5 | |
| | SR84 EB 3353 to 3403 zone 5 | |
| | SR84 WB 1353 to 1403 zone 5 | |
| | Ramp K-2 EB bypass at Pine Island zone 4 & 5 | |
| | Ramp L-1 EB west of Pine Island zone 5 | |
| | Ramp M EB west of Pine Island zone 5 | |
| 5 | Drainage | |
| 1, 4-8 | Corridor Wide Lighting | |
| 5 | Express Lanes Bridge over Pine Island Road | 000114 |
| 5 | Ramp K-2 over Pine Island Rd. - Bypass | 000115 |
| 5 | I-595 EB over Pine Island Rd. | 860358 |
| 5 | Pine Island Road Over NNRC | 860165 |
| | | |
| **C3TS** | | |
| 4 | Roadway Design Zone 4 | |
| | Express 2298 to 2353 zone 4 | |
| | I595 EB 2298 to 2353 zone 4 | |
| | I595 WB 4298 to 4353 zone 4 | |

| Zone | Scope Item | Bridge Data No. |
|---|---|---|
| | SR84 EB 3298 to 3353 zone 4 | |
| | SR84 WB 1298 to 1353 zone 4 | |
| | Ramp J EB west of Nob Hill zone 4 | |
| | Ramp K-1 EB east of Nob Hill zone 4 | |
| | Ramp L-2 EB west of Pine Island zone 4 | |
| 1 thru 8 | Corridor Wide Utility Design | |
| 1 thru 8 | Corridor Wide Pavement Design | |
| | | |
| **R. J. Behar** | | |
| 3 | Drainage Zone 3 | |
| 4 | Drainage Zone 4 | |
| 5 | Drainage Zone 5 | |
| 6 | Drainage Zone 6 | |
| 8a | Drainage Zone 8a | |
| 8b | Drainage Zone 8b | |
| 2 and 3 | Lighting | |
| 1 thru 8 | Corridor-Wide Drainage Analysis | |
| 4 and 6 | Drainage | |
| 1 thru 8 | Corridor Wide Signalization | |
| | | |
| **BHA** | | |
| 1 | Roadway Design Zone 1 | |
| 2 | Roadway Design Zone 2 | |
| 1 | Drainage Zone 1 | |
| 2 | Drainage Zone 2 | |
| 1 | Express Lanes over SW 136th Av. | 000101 |
| 1 | I-595 WB over SW 136th Av. | 860383 |
| 1 | I-595 EB over SW 136th Av. | 860384 |
| 1 | Commodore Drive over NNRC | 864024 |
| 2 | SW 125th Avenue over NNRC | 864022 |
| 2 | I-595 WB over Flamingo Rd. | 000102 |
| 2 | Express Lanes Bridge over Flamingo Rd. | 860368 |
| 2 | I-595 EB over Flamingo Rd. | 860369 |
| 2 | Flamingo Rd. over NNRC (SB) | 864096 |
| 2 | Flamingo Rd. over NNRC (NB) | 864097 |
| 4 | Express Lanes Bridge over Nob Hill Road | 000110 |
| 4 | I-595 WB over Nob Hill Rd. | 860359 |
| 4 | I-595 EB over Nob Hill Rd. | 860360 |
| 4 | Nob Hill Road over NNRC | 860356 |
| 6 | I-595 WB over University Dr. | 860391 |
| 6 | Express Lanes Bridge over University Drive | 860392 |
| 1 & 2 | Retaining Walls | |
| | | |
| **F. R. Aleman** | | |
| | Corridor Wide ITS & Temporary Traffic and Signalization | |

| Section | Scope Item | Bridge Data No. |
|---|---|---|
| **Curtis & Rogers** | | |
| | Aesthetics and Landscaping | |
| **MACTEC** | | |
| | Corridor Wide Geotechnical Design | |
| | Corridor Wide Geotechnical Drilling and Testing | |
| **CECOS** | | |
| | Corridor Wide environmental permitting support | |

### 4.2 The Project Office

Initially, the project management office was located at 3750 NW 87th Ave, 3rd Floor, Miami, Florida and moved to the project site at 10368 State Road 84, Suite 201 in Davie in April 2009. Its function will be to manage multiple AECOM offices and subconsultant firms and facilitate appropriate liaison with Dragados.

### 4.3 Roles and Responsibilities

As noted in Section 3.2.2, the design process will be 'vertically integrated' to ensure that relevant information to and from the end user is properly and efficiently conveyed. This will be achieved through regular weekly meetings, milestone reviews, team member feedback, and **continuous communication**.

Individual Roles and Responsibilities were developed and are detailed in the following sections.

#### 4.3.1 Project Manager

The Project Manager (PM) is located in the PMO at the project site in Davie. The PM is responsible for the following:

- Overall management (e.g., schedule, budget, quality control, health and safety, etc.)
- MOUs/Agreements with AECOM offices and subconsultants resp.
- Client liaison (non-technical)
- Attend formal and informal meetings with Dragados
- Together with the Design Manager conduct weekly progress meetings with Discipline Leads
- Participate in milestone review meetings
- Advisory to Team
- Final issue resolution
- Dispute resolution between AECOM and subconsultants (also including other AECOM offices)
- Manage AECOM's risk
- Monthly progress reports and invoicing to Dragados and Level 3 Reporting

**Measurements of Productivity:**

- Bi-weekly review of schedule, actual to plan
- Deliverables on time and complete
- No reportable/recordable incidents

**Measurement of Satisfaction:**

- Clear direction to AECOM and subconsultants
- No surprises to AECOM Senior Management
- No disputes elevated to AECOM Senior Management

### 4.3.2 Design Manager

The Design Manager (DM) will be located in the PMO at the project site in Davie. The DM is responsible for the following:

- Management of design activities
- Client liaison (technical)
- Solicit Dragados involvement and comments (i.e. constructability issues)
- Responding to Independent Engineer (IE) as requested by Dragados
- Attend formal and informal meetings with Dragados
- Together with the PM, conduct weekly progress meetings with Discipline Leads
- Chair milestone review meetings
- Advisory to Team
- Technical issue resolution
- Manage AECOM's technical and schedule risk
- Change Control – deal with and track change orders

**Measurements of Productivity:**

- Meeting design schedule
- Deliverables on time and complete with desired quality
- No reportable/recordable incidents

**Measurement of Satisfaction:**

- Dragados satisfaction with work progress/deliverables
- Clear technical direction to AECOM offices and subconsultants
- No non-conformances from Independent Engineer/FDOT audits.

### 4.3.3 Discipline Leads

Discipline Leads (DLs) for major disciplines will be located in the PMO as required. Major disciplines have been identified as roadways, structural, drainage, traffic, utilities, environmental and electrical. We will also have an Inter-disciplinary Coordinator who will reside in the PMO. The inter-disciplinary coordinator will be responsible for coordinating the work as shown in the left half of the design organization, as shown in Exhibit E, Project Organization, scheduling Inter-disciplinary Reviews and coordination meetings.

DLs in their home offices will be as follows:

- Environmental – Steve Duda (Greenville)
- Traffic – Vivek Reddy (Sunrise)
- Utility - Pedro Ugas (C3TS), part time in PMO

**Responsibilities include:**

- Reporting and Communication with the DM
- Keeping track of inputs and outputs, and design changes
- Review data collection needs with TLs and provide a list of required information to fellow DLs
- Timely distribution of new information to/from the DM, other DLs and (TLs)
- Spot check verification and written 'sign-off' on milestone submittals
- Assisting DM in communicating with Dragados as necessary (if endorsed by Dragados)
- Preparing technical letters/responses to the IE/FDOT for DM
- Bringing to the attention of the DM and preparing Change Requests
- Constant communication with related DLs
- Regular weekly progress meetings/conference calls with TLs
- Clear direction and advice to TLs
- Set priorities
- Dispute resolution at team level
- Review deliverables prior to submittal to Dragados
- Schedule and budget his (hers) respective discipline
- Strive for limited rework

**Measurements of Productivity:**

- Maintain discipline schedule (ensure timely input to dependent disciplines)
- Track submittal dates of deliverables

**Measurement of Satisfaction:**

- Meet Team's expectations
- Resolve all issues within set time before getting to DM attention
- Meet contract obligations
- Meet Dragados and FDOT expectations
- No safety issues

### 4.3.4 Task Leads

The Task Leads (TLs) will be located full time with the staff producing their task deliverables in respective AECOM and subconsultant offices. Responsibilities include:

- Reporting to and communication with respective Discipline Lead
- Meet schedule for deliverables
- Assisting Discipline Lead with responses to Dragados/IE/FDOT requests/comments
- Technical participation in the design
- Monitor safety

- Ensure completion of QC prior to submission of deliverables to Dragados and FDOT
- Sign and seal task deliverables (i.e. final construction drawings and reports)

**Measurements of Productivity:**
- Maintain schedule
- Ensure submittal dates and accuracy/quality of deliverables

**Measurement of Satisfaction:**
- Meet Team's expectations
- Resolution of all issues within set time before getting to DL/DM attention
- Meet contract obligations
- Meet quality expectations
- No safety issues

#### 4.3.5 Task Team (= Design Team)

The Task Team will usually consist of 3 to 5 designers lead by the Task Lead to produce design/reports, details, analysis, calculations etc. within the discipline and/or portion thereof. The team members will conduct their own internal quality control (checking) as described in Section 13 – Quality Control.

## 5.0 CODES, STANDARDS, PERMITS, AND LICENSES

The Project will be managed in accordance with the Concession Agreement (CA), Technical Requirements in particular, and Exhibits to the CA, as applicable, as well as in accordance with the Design Agreement between Dragados and AECOM. All Team Members will maintain licenses relative to the work performed.

## 6.0 NOT USED

## 7.0 SAFETY, HEALTH AND ENVIRONMENTAL PROGRAM

AECOM's Health and Safety Plan (HASP) reflects management concern for the health, safety and well being of all employees. It provides guidance to supervisory personnel and direction to all employees for minimizing exposure to injury and occupational illness. Project specific training will be provided.

Apart from the customary health and safety office hazards (i.e. ergonomics, moving boxes, fire etc.), expected field activities for designers will be site visits to verify original ground features and conditions, and utilities. The associated hazards include: highway traffic, fall hazard, materials/product handling, foot and head hazards, noise exposure, environmental hazards (rain, heat, mud, etc.), confined space entry (culverts).

For pure field activities such as Survey and Geotechnical, project specific training will be provided next to evidence that subconsultants have a valid HASP. For post-design field activities, a more extensive training will be provided.

AECOM is committed to a policy where full compliance with existing Plan regulations (rules, regulations and laws) is a requirement of all operations. In addition, AECOM recognizes its responsibility to actively manage all safety concerns under its direction. Each employee completes a Safety Health and Environmetal Training Needs Assessment (TNA) specific to their duties on assigned projects. The TNA is reviewed and approved by their manager and reviewed by the District Safety Manager, and is reviewed and changed upon any change in assignments and at least annually. This sets the level of SH&E training for each employee assigned to the project, training that will prepare each employee for the hazards described above.

Upon initiation of the HASP, all employees are expected to take responsibility for their actions and perform work consistent with the requirements of the plan. Employees are encouraged to assist with the implementation of the safety program and to identify potential hazards that they may notice.

The DLs will assure that subcontractors comply with Safety and Health requirements as described by their contracts. Company personnel will adhere to the Health and Safety Program.

We understand that Dragados may conduct project specific training for every participant on the project. Details will be provided at a later date.

## 8.0 PROCUREMENT MANAGEMENT PLAN

### 8.1 Prime Contract Administration

AECOM executed the contract with Dragados with assistance of the Legal Department and Senior AECOM Management and ensured implementation of all terms and conditions of the contract.

### 8.2 Subcontract Administration

#### 8.2.1 Overview

The subcontract administration will primarily be the responsibility of the PM and DLs with administrative support.

## 9.0 NOT USED

## 10.0 PROJECT ADMINISTRATION

### 10.1 Communication

As discussed previously, the project team will function as a unit, facilitating open communications between all Team Members. Open communications will be encouraged at all levels of the project with the reporting sequence and linkages noted previously and shown on the organizational chart (Exhibit A). Continuous and consistent project communications on a fast-paced project as this are paramount to the success of the project. All formal correspondence will be sent under the signature of the PM or designees.

Project correspondence will be handled per the following:

#### 10.1.1 Incoming Correspondence

1. Incoming mail will be opened and date stamped by the document control administrator.

2. Incoming correspondence will be scanned and distributed to the appropriate DL(s) to take action.

3. Hard copy correspondence will be filed in accordance with the filing procedure of each office. The PM, DM and DLs will be responsible for assigning proper file # on each document.

#### 10.1.2 Outgoing Correspondence

1. Outgoing correspondence must be copied to the appropriate DL and be maintained in the Project File.

2. Significant telephone conversations will be recorded using the Notes of Telephone Conversation. Copies shall be furnished to the DL.

3. E-mail correspondence will be tracked and recorded using the AECOM automated archive system.

4. Hard copy correspondence will be filed in accordance with the filing procedure of each office. The PM and DLs will be responsible for assigning proper file # on each document.

### 10.2 Meetings

Various internal and external meetings are discussed in Section 3.2.2. The purpose of these meetings will be to coordinate work activities, identify problems, develop solutions and provide uniform guidance instructions. The agenda will include schedule progress, safety, quality, workforce productivity, compliance with project goals, and budget. These meetings will either be handled through teleconferences or face-to-face meetings as appropriate. Notes of Meetings will be taken to record important information and specific action items.

### 10.3 Monthly Reports

Each Subconsultant and AECOM TLs will prepare a Monthly Report which will incorporate the previous month's activities and plan for next month. This report will include a narrative summary of work activities, schedule status, significant events, incidents, or complaints, and key activities to be performed during the next month. The report will include, as attachments, any relevant information and will be reviewed by respective DLs. This report is due to the PM on the 23rd of each month.

### 10.4 Personnel Policies

Personnel policies, affirmative action, civil rights, hiring, terminations, etc., will be in accordance with each team member's corporate requirements and policies.

## 11.0 DOCUMENT CONTROL

Among the first mobilization activities of this project will be the establishment the Design Quality Management Plan (DQMP). This document will include document control and submittal process. Each subconsultant/AECOM office, including the PMO, will be responsible for their own document control and filing system. The PMO will establish file naming convention for drawings (may be directed by Dragados). The PMO will compile all I-595 project documents, and distribute and/or upload relevant documents to Sharepoint. All hard copy documents will be handled by a Project Administrator.

### 11.1 Deliverables

The deliverables, including mode (electronic and/or hard copy), are clearly stated in the Agreement. Unless otherwise requested, they will be always provided to the PMO, unless requested differently. Deliverables will be submitted according to the Design Schedule at established milestones (i.e.60, 90 percent of completion and 'Released for Construction') for each component submittal in each Zone, or as otherwise requested by Dragados.

## 12.0 PROJECT CONTROLS

Project Controls shall be implemented in accordance with Project Procedures.

### 12.1 General

The Team's project controls philosophy places special emphasis on thorough planning and control of the work by the team/office responsible of the work. Each team is made accountable for the schedule with work identified to the most efficient level of detail. Everyone concerned is made aware of the schedule through effective communication and sharing of information. The schedule control uses a hierarchical, integrated system of computerized scheduling techniques to assist the Project Team in developing a valid performance plan. Activity logic integration will be accomplished through a Project Work Package Schedule in accordance with the Work Breakdown Structure (WBS).

### 12.2 Project/Task Schedules

A tentative schedule is shown in Exhibit B reflecting guidance by Dragados.

The schedule is established for each Zone and discipline. Each Zone Package will comprise milestones and individual design disciplines and cascade down to individual deliverables. Summary and detail level schedules will be used to integrate all of the activities and tasks on the project. The schedules will provide sufficient detail to identify the specific requirements, responsibilities, and measurable results required to meet key target dates.

The task plans will identify the major milestones, sequence of work, duration to accomplish the work, and the logical activity ties to effect its completion. Deliverable work plans will be developed with manpower requirements based on the assigned budget and planned timeframe to execute the work. Primavera PPP 6 will be used to model the Project and Task Plans. The critical path method (CPM) schedule will be

maintained for the duration of the project. The elimination of surprises will be the principle theme of the overall control effort.

Key milestones and objectives will be developed for each individual task. The project plan will be tracked actual versus planned schedule on a monthly basis, at a minimum.

The PM has the primary responsibility for schedule control. DLs and TLs have the responsibility for the task schedules, which all roll up into the master project schedule.

During project meetings, the PM, or the DM, will review the look-ahead schedule with the team members, identify any critical path impacts, and review any work-around or recovery plans to ensure the project milestones are protected from slippage. The PM will provide the project team with actual schedule progress on a bi-weekly basis, as well as any work-around plans, or schedule recovery plans, as required. The master schedule will be updated on a monthly basis.

### 12.3 Project Costs

A Commitment Tracking System shall be established. The WBS in Oracle will be closely reflecting WBS in the design schedule including identifier for a subconsultant or AECOM office to ensure that any discrepancies indicating either schedule slippage or budget issues are identified early. Individual WBS tasks and budgets will be monitored weekly. Project costs are identified by the project budget, which will be maintained and issued monthly by the PM including the budgeted amount, actual costs to date and forecast to complete. The report will be part of the Project Monthly Report and will be the responsibility of Project Controls Person.

The PM or his designate will review, during the weekly task meetings, all costs, schedule compliance and progress for the Project. Earned value analyses will be conducted to monitor the project performance. The % completion will be assessed by the PM based on milestone reached.

All this information will be used for design invoicing to Dragados, including monthly progressed schedule, design progress report (per discipline and zone), and if required, snapshot of design drawings.

## 13.0 QUALITY CONTROL AND QUALITY ASSURANCE

The Design Quality Management Plan (DQMP) addresses all project work, including the work of subconsultants. This plan will reflect the desired design quality control and assurance process outlined below as well as items potentially requested by Dragados (i.e. record retention period, file/drawing name convention, etc.).

### 13.1 General

The design team is committed to the application of responsible and professional quality control for all project deliverables, including subconsultant deliverables, to ensure accuracy, completeness and adequacy for the intended purpose. As the leading consultant, AECOM will be fully responsible for all aspects of design quality control on this assignment, including the work of subconsultants.

The design activities will be assigned to professionally qualified individuals who will be required to comply with the DQMP. Design information will be communicated and controlled by minutes of meetings and by engineering drawings.

Design quality control includes management and monitoring of design inputs and outputs.

*Design Inputs* – the Task (=Team) Leader (TL) maintains a list of design inputs that require control (such as survey, geotechnical, traffic, as built drawings, various reports, technical standards, specifications, codes etc.). The Design Quality Manager (DQM) verifies that the inputs are addressed in the DQP and develops quality procedures to address their adequacy and accuracy where required. Checklists, independent reviews and verification procedures, utilizing the expertise of the Discipline Leads and Task Leads and other design supervisors are utilized to achieve this goal.

*Design Outputs* - the design engineers are responsible for ensuring that the design outputs can be verified and validated against design input requirements.

Specifically, engineering drawings and other design outputs (i.e. plans, specifications, calculations, reports etc.) must contain or make reference to acceptance criteria and must identify those characteristics of the design that are crucial to the safe and proper execution of the project, to the safe and proper operation of the highway and to compliance with environmental requirements.

The TL maintains a design checklist to ensure that design engineers adopt a consistent format and content in order to ensure consistency of the information delivered to the follow-on designers and contractors.

### 13.2 Design Reviews

Design Quality Control and Technical Reviews will be conducted as required by the DQMP and design schedule to ensure a documented comprehensive and systematic examination of the design carried out at appropriate stages of the design, including Advance Packages.

Formal design reviews may be conducted at established milestones at 30%, 60% and 90% completion of the zone design package. These hold points may change as a result of change in schedule and/or Contractor requirements, and separate advance packages for construction may be required. However, the design quality control process for submittals would remain as outlined below.

Design review meetings must include representation of the parties with significant input to the design. The design reviews must verify that all required inputs have been incorporated into the work and that design outputs meet all design input requirements.

A resource table for monitoring and auditing all designs services and reviews is shown below.

| Type of Design Quality Review | Performed by | Activity | Responsibility |
|---|---|---|---|
| Internal checking | Design team members | Quality control | Task Leader (TL) |

| | | | |
|---|---|---|---|
| Quality Audit | Quality auditor | Quality Assurance | Design Quality Manager (DQM) |

*Design verification* - is conducted to ensure that design outputs at that stage of design meet relevant input requirements including usability to the recipient. In addition to scheduled design reviews, design verification may include performing alternative calculations, comparison with similar proven designs and independent reviews of the design and its documentation prior to release. Design verification occurs continuously throughout the design process. Ongoing feedback between design disciplines and construction will produce design inputs and outputs that are more efficiently integrated into the next design phase and more easily implemented during construction.

The design outputs provided by a design discipline to the overall design of highway section should be verified to ensure that they meet requirement of the next user. For example, geotechnical recommendations provided to the highway designer must be in a format that can readily be used to develop the road or structural design; the road design package must meet contractor's need for clarity, accuracy and consistency of presentation.

*Design Validation* **-** is a demonstration that the project, or part of it, conforms to defined user needs and requirements. The task managers and quality managers will ensure user acceptability of various elements to prevent duplication of any shortcomings elsewhere in the project.

Due to the size of the project, the design has been be split into a minimum nine basic packages per nine geographic zones with milestones as noted above and a design team per zone (refer to Section 3.2 for details on design packages).

The TL is responsible that quality control at the design team level is performed and that it is built into the overall design schedule. Generally, two weeks prior to milestone submission should be put aside for quality control and revisions. TL's responsibility is to ensure that appropriate action is taken on all comments and issues arising from the project quality control/reviews.

The TLs will directly supervise assigned project design elements and will sign and date all design plans, reports and submittals for each element. These individuals will cooperate with and assist the design quality control engineers.

All drawings, specifications, studies, reports, calculations and deliverables will be subject to a three stage internal review process prior to any milestone submittal:

*Internal checking* – continuous activity by members of the design team where design, calculations and specifications, and reports will be checked using appropriate checklists at appropriate milestones and signed off prior to Independent/Internal Reviews. Relevant checklists will be signed off by appropriate staff ("done by", "checked by") and reviewed by the TL.

Any drawing(s), specifications, reports or other design documents to be submitted to the client between formal milestone submissions will be checked by a second person prior to the submission.

### 13.3 Quality Records

Quality Records are objective evidence that specified quality control procedures and quality assurance processes were performed. These records are to be submitted in accordance with Project requirements.

To ensure accuracy, completion and quality in necessary submittals, all project drawings/reports during development of the design/report, including formal reviews, must serve as evidence (together with all applicable checklists) that design control was performed and must be handled per Quality Procedures included in the DQMP.

The PM and TLs will be responsible for enforcing the quality procedures.

*Review Reports/Minutes* - All review reports and/or Minutes will be filed by the TL in appropriate Quality file.

### 13.4 Subconsultant Work

All work performed by subconsultants will be reviewed by DLs to ensure that their work conforms to the project scope and specifications. Design subconsultants will report to us for the products they deliver. Subconsultants will be required to review and professionally seal all work that they produce in accordance with all applicable laws and regulations. All design subconsultant submittals will be reviewed and certified by the subconsultant as meeting the requirements of their QMP or QA/QC and project specifications. Relevant QA/QC documentation will be provided with each deliverable.

### 13.5 Internal Quality Audits

The Design Quality Manager (DQM) is responsible for establishing and maintaining a system of internal audits and will be responsible for training and supervision of all internal auditors.

Internal quality audits will be performed by qualified personnel who are independent of those having direct responsibility for the activity being audited. Internal audits will be performed after all milestone design quality control and Independent Design Reviews have been performed. Quality audit will also be performed prior to the “Issued for Construction” documents. The auditor reviews relevant documents and interviews personnel using his audit checklist.

The DQM will ensure that audit results are recorded and brought to the attention of appropriate personnel (i.e. Task Leader and/or Discipline Lead). Managers responsible for the activity being audited will ensure that prudent and timely corrective action is taken to resolve all identified deficiencies. Follow up audits will be used to verify the corrective action taken and its effectiveness.

If any recurring problems exist, they will be brought to the attention of the PM. Quality audit results will also be used as a tool to review and implement continuous improvement to the DQMP and design activities.

### 13.6 Project Audit Activities

Periodically, Corporate AECOM personnel will conduct audits to assure that activities are in compliance with this Work Plan. The auditor will be independent of the project personnel.

In addition, it is anticipated that the Executive Committee comprised of Senior Corporate personnel will conduct a sit-down with the PM and meet with Dragados to ensure that project is on track and Dragados is satisfied with work to date.

## 14.0 TEAM FEEDBACK

Feedback from Team members at all levels will be sought and considered/acted upon to assist with efficient performance on the project.

Direct feedback between the DLs and TLs will occur throughout the duration of the I-595 Project. This feedback is designed to eliminate concerns and conflicts at the lowest possible level. If conflicts or concerns cannot be resolved at the TL and/or DL level, the issue will be elevated to the PM level for resolution.

Exhibit C – I-595 Component Submittal Matrix Flowchart

# I-595 COMPONENT SUBMITTAL MATRIX FLOW CHART

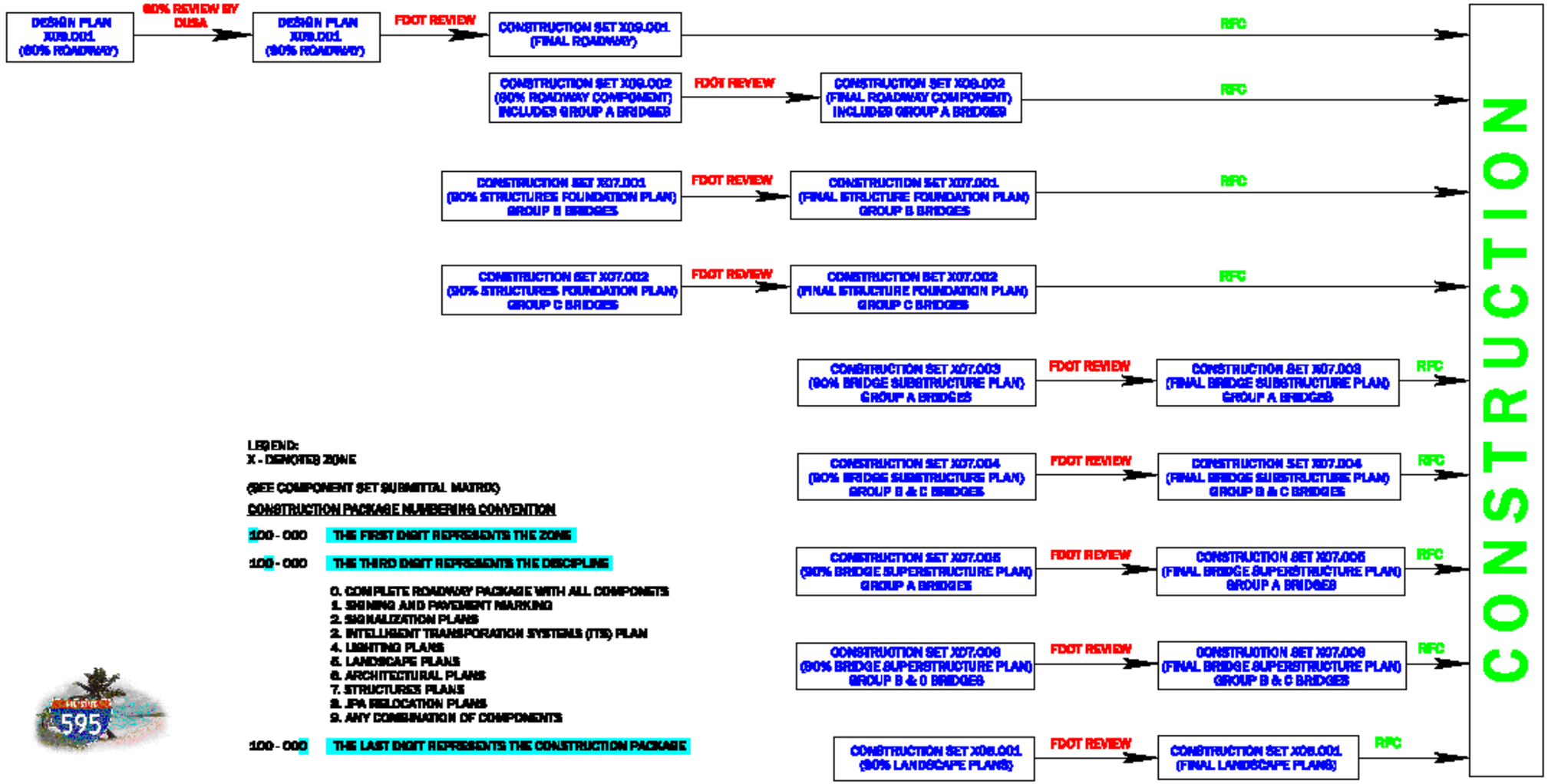


**Exhibit C1 – I-595 Component Set Submittal Matrix**

# I-595 COMPONENT SET SUBMITTAL MATRIX

AECOM

**DESIGN PLAN - PACKAGE X09.001**
**(60% ROADWAY)**

1) KEY SHEET (PRELIMINARY)
2) TYPICAL SECTION SHEET (COMPLETE)
3) SUMMARY OF PAY ITEM (NOT INCLUDED)
4) DRAINAGE MAP INCLUDING INTERCHANGE DRAINAGE MAP (PRELIMINARY)
5) OPTIONAL PIPE MATERIAL TABULATION (NOT INCLUDED)
6) PROJECT LAYOUT (COMPLETE)
7) PLAN AND PROFILE (MAINLINE, SHOULDERS, AND RAMPS) (PRELIMINARY)
8) SPECIAL PROFILES (PRELIMINARY)
9) INTERCHANGE LAYOUT AND DETAILS (NOT INCLUDED)
10) CROSS SECTIONS (PRELIMINARY NO EARTHWORK)
11) BACK OF SIDEWALK PROFILES (NOT INCLUDED)
12) DRAINAGE STRUCTURES AND DETAILS (PLAN VIEW ONLY, NO CROSS SECTION & AS NEEDED FOR PERMIT)
13) OUTFALL/LATERAL DITCH (PRELIMINARY)
14) INTERSECTION DETAILS/PLATEAU (NOT INCLUDED)
15) ROADWAY SOIL SURVEY(PRELIMINARY)
16) RETENTION/DETENTION POND DETAIL (PRELIMINARY)
17) MAINTENANCE OF TRAFFIC (PRELIMINARY, MAJOR PHASES ONLY)
18) ROADWAY COMPUTATION BOOK (NOT INCLUDED)
19) UTILITY ADJUSTMENT SHEET (PRELIMINARY)
20) STORM WATER POLLUTION PREVENTION PLAN (COMPLETE)
21) STRUCTURES GEOMETRY

60% REVIEW

**DESIGN PLAN - PACKAGE X09.001**
**(90% ROADWAY)**

1) KEY SHEET (COMPLETE)
2) TYPICAL SECTION SHEET (COMPLETE)
3) SUMMARY OF PAY ITEM (NOT INCLUDED)
4) DRAINAGE MAP INCLUDING INTERCHANGE DRAINAGE MAP (COMPLETE)
5) OPTIONAL PIPE MATERIAL TABULATION (COMPLETE)
6) PROJECT LAYOUT (COMPLETE)
7) PLAN AND PROFILE (MAINLINE, SHOULDERS, AND RAMPS) (COMPLETE)
8) SPECIAL PROFILES (COMPLETE)
9) INTERCHANGE LAYOUT AND DETAILS (COMPLETE)
10) CROSS SECTIONS (PRELIMINARY, NO EARTHWORK)
11) BACK OF SIDEWALK PROFILES (NOT INCLUDED)
12) DRAINAGE STRUCTURES AND DETAILS (PLAN VIEW AND DRAINAGE STRUCTURE SHEETS, COMPLETE)
13) OUTFALL/LATERAL DITCH (COMPLETE)
14) INTERSECTION DETAILS/PLATEAU (NOT INCLUDED)
15) ROADWAY SOIL SURVEY (COMPLETE)
16) RETENTION/DETENTION POND DETAIL (COMPLETE)
17) MAINTENANCE OF TRAFFIC (COMPLETE)
18) ROADWAY COMPUTATION BOOK (NOT INCLUDED)
19) UTILITY ADJUSTMENT SHEET (COMPLETE)
20) STORM WATER POLUTION PREVENTION PLAN (COMPLETE)
21) ROADWAY DETAIL (COMPLETE)
22) DRAINAGE CALCULATION (COMPLETE)
23) SUMMARY OF DRAINAGE STRUCTURES (NOT INCLUDED IF DRAINAGE STRUCTURE SHEETS ARE INCLUDED)
24) QUANTITIES IN EXCEL (INCLUDING EARTHWORKS)

(COMPONENT PLANS FOUNDATION AND CONDUITS)

1) SIGNING (FOUNDATION LOCATIONS & CONDUITS)
2) SIGNALIZATION PLAN (FOUNDATION LOCATIONS & CONDUITS)
3) INTELLIGENT TRANSPORTATION SYSTEM (FOUNDATION LOCATIONS & CONDUITS)
4) LIGHTING PLAN (FOUNDATION LOCATIONS & CONDUITS)
5) GROUP A BRIDGES FOUNDATION PLAN
6) WALL PLAN

90% SUBMITTAL

**DESIGN PLAN - PACKAGE X09.001**
**(FINAL ROADWAY)**

1) KEY SHEET (COMPLETE)
2) TYPICAL SECTION SHEET (COMPLETE)
3) SUMMARY OF PAY ITEM (NOT INCLUDED)
4) DRAINAGE MAP INCLUDING INTERCHANGE DRAINAGE MAP (COMPLETE)
5) OPTIONAL PIPE MATERIAL TABULATION (COMPLETE)
6) PROJECT LAYOUT (COMPLETE)
7) PLAN AND PROFILE (MAINLINE, SHOULDERS, AND RAMPS) (COMPLETE)
8) SPECIAL PROFILES (COMPLETE)
9) INTERCHANGE LAYOUT AND DETAILS (COMPLETE)
10) CROSS SECTIONS (COMPLETE, NO EARTHWORK)
11) BACK OF SIDEWALK PROFILES (NOT INCLUDED)
12) DRAINAGE STRUCTURES AND DETAILS (PLAN VIEW AND DRAINAGE STRUCTURE SHEETS, COMPLETE)
13) OUTFALL/LATERAL DITCH (COMPLETE)
14) INTERSECTION DETAILS/PLATEAU (NOT INCLUDED)
15) ROADWAY SOIL SURVEY (COMPLETE)
16) RETENTION/DETENTION POND DETAIL (COMPLETE)
17) MAINTENANCE OF TRAFFIC (COMPLETE)
18) ROADWAY COMPUTATION BOOK (NOT INCLUDED)
19) UTILITY ADJUSTMENT SHEET (COMPLETE)
20) STORM WATER POLLUTION PREVENTION PLAN (COMPLETE)
21) ROADWAY DETAIL (COMPLETE)
22) DRAINAGE CALCULATION (COMPLETE)
23) SUMMARY OF DRAINAGE STRUCTURES (NOT INCLUDED IF DRAINAGE STRUCTURE SHEETS ARE INCLUDED)
24) QUANTITIES IN EXCEL (INCLUDING EARTHWORKS)

(COMPONENT PLAN FOUNDATION AND CONDUITS)

1) SIGNING (FOUNDATION LOCATIONS & CONDUITS)
2) SIGNALIZATION PLAN (FOUNDATION LOCATIONS & CONDUITS)
3) INTELLIGENT TRANSPORTATION SYSTEM (FOUNDATION LOCATIONS & CONDUITS)
4) LIGHTING PLAN (FOUNDATION LOCATIONS & CONDUITS)
5) GROUP A BRIDGES FOUNDATION PLAN
6) WALL PLAN

GROUP A BRIDGES (SEE ATTACHED)

GROUP B BRIDGES (SEE ATTACHED)

GROUP C BRIDGES (SEE ATTACHED)

**90% COMPONENT PACKAGE X09.002**

1) SIGNING AND PAVEMENT MARKING
2) SIGNALIZATION PLAN
3) INTELLIGENT TRANSPORTATION SYSTEM PLAN
4) LIGHTING PLAN
5) INTERSECTION DETAILS/PLATEAU

**90% STRUCTURES COMPONENT PACKAGE X07.001**
GROUP B BRIDGES FOUNDATION PLAN

**90%STRUCTURES COMPONENT PACKAGE X07.002**
GROUP C BRIDGES FOUNDATION PLAN

**90% COMPONENT PACKAGE X05.001**
LANDSCAPE PLAN

SEE SCHEDULE → **COMPONENT PACKAGE X09.002 (FINAL)**
1) SIGNING AND PAVEMENT MARKING
2) SIGNALIZATION PLAN
3) INTELLIGENT TRANSPORTATION SYSTEM PLAN
4) LIGHTING PLAN
5) INTERSECTION DETAILS/PLATEAU

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.001 (FINAL)**
GROUP B BRIDGES FOUNDATION PLAN

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.002 (FINAL)**
GROUP C BRIDGES FOUNDATION PLAN

SEE SCHEDULE → **90% STRUCTURES COMPONENT PACKAGE X07.003**
GROUP A BRIDGES SUBSTRUCTURE PLAN

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.003 (FINAL)**
GROUP A BRIDGES SUBSTRUCTURE

SEE SCHEDULE → **90% STRUCTURES COMPONENT PACKAGE X07.004**
GROUP B & C BRIDGES SUBSTRUCTURE

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.004 (FINAL)**
GROUP B & C BRIDGES SUBSTRUCTURE

SEE SCHEDULE → **90% STRUCTURES COMPONENT PACKAGE X07.005**
GROUP A BRIDGES SUPERSTRUCTURE

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.005 (FINAL)**
GROUP A BRIDGES SUPERSTRUCTURE

SEE SCHEDULE → **90% STRUCTURES COMPONENT PACKAGE X07.006**
GROUP B&C BRIDGES SUPERSTRUCTURES

SEE SCHEDULE → **STRUCTURES COMPONENT PACKAGE X07.006 (FINAL)**
GROUP B&C BRIDGES SUPERSTRUCTURE

SEE SCHEDULE → **COMPONENT PACKAGE X05.001 (FINAL)**
LANDSCAPE PLAN

FDOT APPROVAL → CONSTRUCTION

NOTE:
SEE ASSUMPTIONS

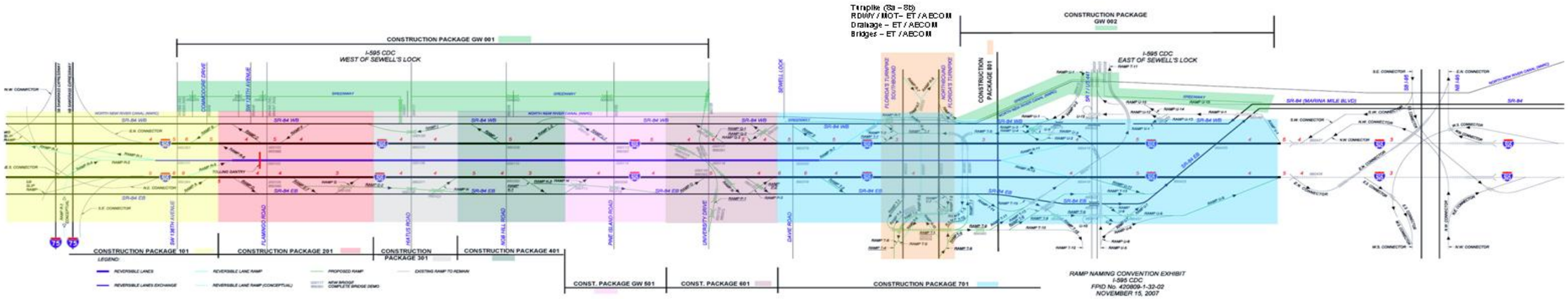
## Exhibit C2 – I-595 Bridge Group Matrix

**I-595 Corridor Roadway Improvements**
**FM No. 420890-3-52-01**
**Project No. 111 074**
**Bridge Group Matrix**

| Bridge | ZONE | Group A | Group B | Group C | NOTES |
|---|---|---|---|---|---|
| 000101 | 1 | x | | | |
| 000206 | 1 | x | | | |
| 000207 | 1 | x | | | |
| 860383 | 1 | x | | | |
| 860384 | 1 | x | | | |
| 868048 | 1 | x | | | |
| 000102 | 2 | | | x | |
| 000201 | 2 | x | | | Hiatus Rd - Greenway |
| 000202 | 2 | x | | | Nob Hill Rd - Greenway |
| 860368 | 2 | x | | | |
| 860369 | 2 | | x | | |
| 860849 | 2 | x | | | |
| 864096 | 2 | x | | | |
| 864097 | 2 | x | | | |
| 000105 | 3 | x | | | |
| 000106 | 3 | x | | | |
| 000107 | 3 | x | | | |
| 000108 | 3 | | x | | |
| 000203 | 3 | x | | | Pine Island Greenway |
| 860370 | 3 | | x | | |
| 860371 | 3 | | x | | |
| 864111 | 3 | x | | | |
| 000110 | 4 | x | | | |
| 860356 | 4 | x | | | |
| 860359 | 4 | x | | | |
| 860360 | 4 | x | | | |
| 000111 | 5 | | | x | |
| 000112 | 5 | | x | | |
| 000113 | 5 | x | | | |
| 000114 | 5 | x | | | |
| 000115 | 5 | | | x | |
| 860165 | 5 | x | | | |
| 860358 | 5 | | x | | |
| 000116 | 6 | | x | | |
| 000119 | 6 | | x | | |
| 000122 | 6 | | x | | |
| 000123 | 6 | | x | | |
| 860390 | 6 | | x | | |
| 860391 | 6 | x | | | |
| 860392 | 6 | x | | | |
| 000021 | 7 | | | x | |
| 000025 | 7 | | | x | |
| 000026 | 7 | x | | | |
| 000033 | 7 | | | x | |
| 860378 | 7 | x | | | |
| 860379 | 7 | x | | | |
| 860413 | 7 | | x | | |
| 860414 | 7 | | x | | |
| 860418 | 7 | x | | | |
| 860419 | 7 | | | x | |
| 860420 | 7 | | x | | |
| 860421 | 7 | | x | | |
| 860425 | 7 | | x | | |
| 860426 | 7 | | | x | |
| 860475 | 7 | | | x | |
| 860476 | 7 | | | x | |
| 860477 | 7 | | | x | |
| 000032A | 7 | x | | | |
| 000022 | 8A | x | | | |
| 000023 | 8A | | x | | |
| 000031 | 8A | | x | | |
| 000125 | 8A | x | | | |
| 860533 | 8A | | x | | |
| 860559 | 8A | | x | | |
| 860560 | 8A | | x | | |
| 860562 | 8A | x | | | |
| 000032B | 8B | x | | | |

**Exhibit C2 – I-595 Bridge Group Matrix**
**Attachment 1**

## PROJECT LAYOUT – SUBMITTALS AND WORK ASSIGNMENTS




Station 2150
RDWY / MOT– BHA
Drainage – BHA
Bridges – BHA

Station 2245
RDWY / MOT– BHA
Drainage – BHA
Bridges – BHA

Station 2296
RDWY / MOT– ET / ABCOM
Drainage – ET / ABCOM
Bridges – ET / ABCOM

Station 2353
RDWY / MOT– CJTS
Drainage – Bellar
Bridges – BHA

Station 2403
RDWY / MOT– KHA
Drainage – KHA
Bridges – ET / ABCOM, KHA

Station 2500
RDWY / MOT– GBO
Drainage – ET / ABCOM,
Bridges – ET / ABCOM, GBO,
BHA

RDWY / MOT– ET / ABCOM
Drainage – ET / ABCOM
Bridges – ET / ABCOM

Project Wide Designers:

F.R. Aleman – ITS, Traffic Signals, Traffic Analysis for Lane Closures
Curtis & Rogers – Aesthetics, Landscaping
MACTEC – Drilling and Testing, Geotechnical Design and Post Design

# Appendix 11.7

CONSTRUCTION COMMUNICATION PROTOCOL

# Construction Communication Protocols

The purpose of this document is to outline the communication protocols put in place to govern interaction between Dragados USA, the Corradino Group and HNTB/CGA. Given the complexity of the project and the demanding timelines involved, the protocols selected are simple and efficient.

## General Communication

Day to day construction interaction between all three parties will take place at multiple levels as depicted in Figure 1 with the objective being quick and effective dialogue between team counterpoints. With that said, it is essential that communication between the Contractor and the Oversight CEI **only** goes through the CEI. This will avoid miscommunication or unintentional direction being perceived. The only exception to this rule will be communication regarding EEO/OJT/DBE and Payroll requirements.

The 'communication boundaries' reflected in the figure below are not intended to be rigid or static, but instead are designed to encourage resolution of construction issues at the lowest level possible. With that said an escalation process will continue to be developed and finalized at the next Partnering Meeting to ensure project issues are dealt with in a timely manner whilst still preserving the chain of command. The established escalation process will then be incorporated in the next PMP update.

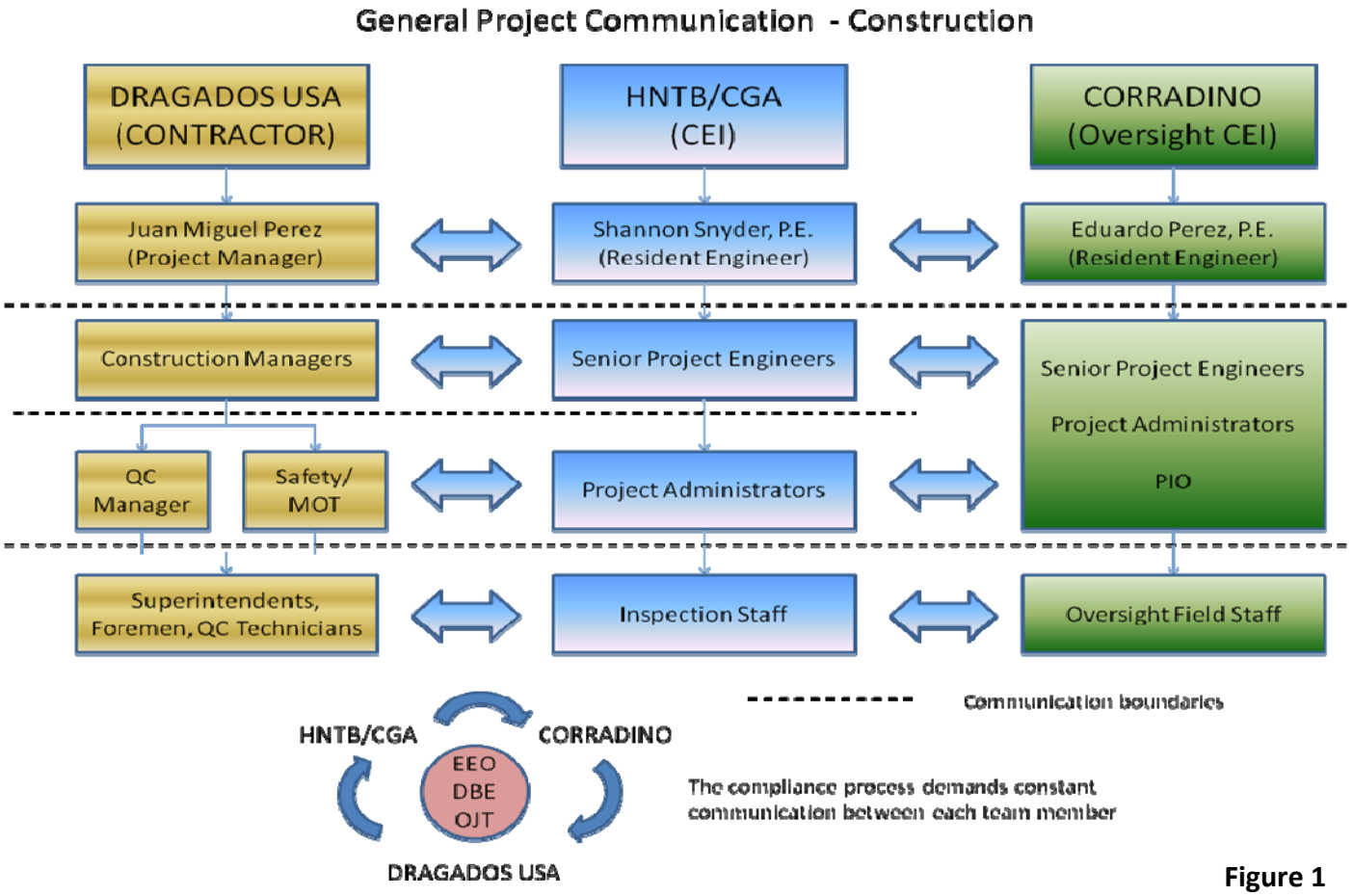



**Figure 1**

To ensure that the I-595 Express LLC is kept fully informed of daily communication between the Contractor, the Oversight CEI and the CEI, the Concessionaire Construction Manager will be copied on all e-mails, transmittals, letters and submittals and will receive Weekly Construction Progress Reports from both Dragados USA and HNTB/CGA providing a summary of all significant events and activities on the project. In addition, the CEI will also provide Weekly Sampling and Testing summaries, advising I-595 Express LLC and the Oversight CEI all QC and VT activities on the project. The Weekly Construction Progress Meeting, held each Thursday and chaired by the CEI will complete the routine General Communication between all involved parties.

## Non-Conformance Report

As with any project, non-conformance events are inevitable and it is essential that an effective communication tool is in place that helps all team members identify, document and track their resolution. To accomplish this task the Non-Conformance Report or NCR as shown in Figure 2 has been developed. A copy of this form is included in Appendix A.

| | | | | |
|---|---|---|---|---|
| INTERSTATE 595 EXPRESS LLC | Non-Conformance Report<br>Ref No. : _____ | | I-595 Corridor Roadway Improvements<br>FIN 420809-3-52-01<br>Contract: E4J69 | Date: _____ |
| Category<br>(Check all applicable) | ☐ Contract Compliance<br>Per concession agreement (Art. 7)<br>☐ Structures<br>☐ Roadway<br>☐ MOT | ☐ Utilities<br>☐ Permit<br>☐ Environmental<br>☐ Offsite | ☐ Materials<br>☐ Other<br>_____<br>_____ | Location: _____<br>Station: _____ Offset<br>Ref: _____ |
| Contract Reference: | | | | |
| Non Conformance Description: | | | | |
| Corrective Action: | | | | Curing Period: |
| Resolution: | | | | |
| Issued by: _____<br>Date/Time: _____ | | | Verified by: _____<br>Date/Time: _____ | |

**Figure 2**

While it is the goal of everyone involved to be proactive and avoid non-conformance events, at the onset of such an instance in the field, the responsible party will be informed by the CEI verbally and Dragados USA will subsequently be issued the above referenced form. The distribution will include the Engineering Manager, the CQC Manager and the Construction Manager for the particular zone in which the event occurred. If the issue is related to Environmental or Safety and MOT the Health and Safety Manager will also be included. The Concessionaire Project Manager will be copied on all such transmittals.

The NCR document is designed to capture the details of the event, its location and the specific section of the contract affected. The same document will also be used to record the resolution action taken, thereby capturing the closeout of the issue on the same report. This process will also be used by Office personnel to communicate concerns related to other areas of the contract. All NCRs will be tracked and each assigned a unique alphanumeric reference to help differentiate between the prime and sub-contractors. Each Weekly Construction Progress Report will detail the NCRs issued and their status to ensure the Oversight CEI is kept fully informed. Given that the contract is explicit on how to deal with issues such as material failures, or non-conforming constructed elements, the purpose of this protocol is not to duplicate procedures that are already established by contract, but rather to notify those individuals responsible to manage the process. At the present it is anticipated that NCRs will be issued using more encompassing categories, such as Materials, Structures, Roadway, Utilities, Permit, Environmental, MOT, General Contract Compliance and Offsite. Issues pertaining to EEO/OJT/DBE and Payroll compliance concerns will be documented and transmitted via letter between the CEI and Dragados USA, copying in the I-595 Express LLC, the FDOT and the Oversight CEI.

If during the course of the NCR process, corrective action has not been taken to satisfy the requirements of the contract within the timelines stipulated therein, the I-595 Express LLC will notify the FDOT and the Oversight CEI via Non-Compliance self reporting as outlined in Section 7 and Appendix 5 of the Concession Agreement.

**Communication Matrix**

To aid the communication process and to ensure contract required transmittals are consistently executed, a Communication Matrix has been established and included in Appendix B. The matrix identifies the type, frequency and responsible parties charged with generating and reviewing each transmittal required, whether it is a copy of an approved QC plan amendment or weekly SWPPP report. As with all other transmittals, logs will be kept by both the Contractor and the CEI and routinely compared to ensure documents have been processed in accordance with the contract. In the event that required transmittals are found to be delinquent, the NCR process described earlier will be enacted.

# Appendix A

# Figure 2

# Non-Conformance Report

INTERSTATE 595 EXPRESS LLC

# Non-Conformance Report

Ref No. : _____

I-595 Corridor Roadway Improvements
FIN 420809-3-52-01
Contract: E4J69

Date: _____

Category
(Check all applicable)

- ☐ Contract Compliance — Per concession agreement (Art. 7)
- ☐ Structures
- ☐ Roadway
- ☐ MOT
- ☐ Utilities
- ☐ Permit
- ☐ Environmental
- ☐ Offsite
- ☐ Materials
- ☐ Other
- _____
- _____

Location: _____

Station: _____ Offset

Ref: _____

Contract Reference:

Non Conformance Description:

Corrective Action:

Curing Period:

Resolution:

Issued by: _____

Date/Time: _____

Verified by: _____

Date/Time: _____

# Appendix B

# Communication Matrix

| | | | | | FIN 420809-3-52-01 Contract E4J69 | |
|---|---|---|---|---|---|---|
| **Project Communication Matrix - between DRAGADOS USA and HNTB/CGA** | | | | | | **Version 1.0** |
| | | | | | | **June 19, 2009** |
| WPM | Weekly Progress Meeting | **OTE: EEO/OJT/DBE Compliance Communication Outlined in Separate Matrix** | | | | |
| WQCM | Weekly QC Meeting | | | | | |
| | | | **FREQUENCY** | | **D-USA** | **HNTB/CGA** |
| **ITEM** | **CATEGORY** | **DESCRIPTION** | **OF TRANSMITTAL** | **DUE** | **Issued By** | **Received By** |
| | | | | | | |
| 1 | **MOT AND SAFETY** | Lane Closure Requests | As needed | 7 days prior to closure | Shawn Musgrave | Shannon Snyder |
| 2 | **MOT AND SAFETY** | MOT Review Report - Night and Day review | Weekly | Monday of the following week | Shawn Musgrave | Mike Gwynne |
| 3 | **MOT AND SAFETY** | Night Work - Lighting Plan or Updates | As needed | Pre-con; 3 days prior to implementing the change | Shawn Musgrave | Mike Gwynne |
| | | | | | | |
| 4 | **ENVIRONMENTAL** | SWPPP Report and Rain Log | Weekly or after 1/2" rainfall | Monday of the following week | Carlos Garzon Manuel Zequeira | Matt Miller |
| 5 | **ENVIRONMENTAL** | Transmit Approved Erosion Control Plan and SWPPP including Updates | As needed | Pre-con; prior to preforming work | Jhon Beltran Carlos Garzon | Matt Miller |
| | | | | | | |
| 6 | **PERMIT** | Transmit Copy of the NPDES NOI | As needed | Pre-con | Jhon Beltran | Mike Gwynne |
| 7 | **PERMIT** | Transmit Copies of all applicable Approved Permits | As needed | Prior to performing work | Jhon Beltran | Mike Gwynne |
| | | | | | | |
| 8 | **SCHEDULE** | Submit CPM Schedule Update | Monthly | 15th of the Month | Richard Dun | Mike Gwynne |
| 9 | **SCHEDULE** | Submit Two Week Look Ahead | Weekly | WPM | Richard Dun | Mike Gwynne |
| 10 | **SCHEDULE** | Work Plan Controlling Item of Work and actual start or finish dates achieved for any activities | Weekly | WPM | Richard Dun | Mike Gwynne |
| 11 | **SCHEDULE** | Request to Work Holidays | As needed | 10 days prior to Holiday | Richard Dun | Shannon Snyder |
| | | | | | | |
| 12 | **MATERIALS** | Submit Updates to the Job Guide Schedule | Monthly | 15th of the Month | Victor Zozaya | Matt Miller |
| 13 | **MATERIALS** | Transmit Approved Quality Control Plan Amendments | As needed | 7 days prior to performing work | Victor Zozaya | Matt Miller |
| 14 | **MATERIALS** | Submit Material Certifications, Mill Analysis, Test Reports | As needed | Prior to incoporating into the project | Victor Zozaya | Matt Miller |
| 15 | **MATERIALS** | Submit Warranty and/or Guarantee | As needed | Prior to Final Acceptance | Victor Zozaya | Matt Miller |
| 16 | **MATERIALS** | LIMS review | Weekly | WQCM | Victor Zozaya | Matt Miller |
| 17 | **MATERIALS** | Construction Compliance with Specifications and Plans | Monthly | 15th of the Month | Victor Zozaya | Matt Miller |
| 18 | **MATERIALS** | Asphalt QC Roadway and Plant Reports | Per Operation | Within 24 hours | Victor Zozaya | Matt Miller |
| 19 | **MATERIALS** | Concrete Tickets | Per Operation | At time of placement | Field Representatives | Field Representatives |
| 20 | **MATERIALS** | Sample/Inspection Coordination | As needed | 24 hours prior to work | Victor Zozaya | Matt Miller |

*** For applicable portion of Advance Construction Activities**

| ITEM | CATEGORY | DESCRIPTION | OF TRANSMITTAL | DUE | Issued By | Received By |
|---|---|---|---|---|---|---|
| | | | | | | |
| 21 | **OFFSITE INSPECTION** | Submit fabrication schedule for all items requiring inspection | Update as needed | 15th of the Month | Victor Zozaya | Matt Miller |
| 22 | **OFFSITE INSPECTION** | Transmit approved fabrication plans or shop drawings | As needed | 4 weeks prior to work | Victor Zozaya | Matt Miller |
| 23 | **OFFSITE INSPECTION** | Sample/Inspection Coordination | As needed | 4 weeks prior to work | Victor Zozaya | Matt Miller |
| | | | | | | |
| 24 | **INSTALLATION PLANS** | Transmit copy of Approved Auger Cast Piles Installation Plan for Noise Walls and Updates | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 25 | **INSTALLATION PLANS** | Transmit copy of Approved Pile Driving Installation Plan and Updates | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 26 | **INSTALLATION PLANS** | Transmit copy of Approved Pile Driving Foundation Plan and Updates | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 27 | **INSTALLATION PLANS** | Transmit copy of Approved Pile Lengths, Driving Criteria etc | As needed | Prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 28 | **INSTALLATION PLANS** | Submit Pile Driving Logs | As needed | Within 24 hours | Field Representatives | Michael Gwynne Matt Miller |
| 29 | **INSTALLATION PLANS** | Submit Pile Foundation Certification Package | As needed | 7 days after the work is complete | Victor Zozaya | Michael Gwynne Matt Miller |
| 30 | **INSTALLATION PLANS** | Transmit copy of Approved Test Pile program and Updates | As needed | 48 hours prior to driving test piles | Victor Zozaya | Michael Gwynne Matt Miller |
| 31 | **INSTALLATION PLANS** | Transmit copy of Approved Drilled Shaft Installation Plan and Updates | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 32 | **INSTALLATION PLANS** | Transmit copy of Approved Drilled Shaft Foundation Plan | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 33 | **INSTALLATION PLANS** | Submit Drill Shaft Foundation Certification Package | As needed | 14 days after the work is complete | Victor Zozaya | Michael Gwynne Matt Miller |
| 34 | **INSTALLATION PLANS** | Transmit copy of Approved Temporary Lighting System | As needed | Before fabrication | Victor Zozaya | Michael Gwynne Matt Miller |
| 35 | **INSTALLATION PLANS** | Transmit Vibration Monitoring Plan and Updates | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| 36 | **INSTALLATION PLANS** | Transmit approved Erection Plans | As needed | 3 days prior to the work | Victor Zozaya | Michael Gwynne Matt Miller |
| | | | | | | |
| 37 | **SHOP DRAWINGS** | Transmit copy of Approved Shop Drawings - Structures | As needed | Prior to incoporating into the project | Jhon Beltran Edwin Cortes | Michael Gwynne |
| 38 | **SHOP DRAWINGS** | Transmit copy of Approved Shop Drawings - Roadway | As needed | Prior to incoporating into the project | Jhon Beltran Edwin Cortes | Michael Gwynne |
| | | | | | | |
| 39 | **CONSTRUCTION PLANS and SPECS** | Transmit Released For Construction Plans | As needed | Prior to work | Jhon Beltran Edwin Cortes | Michael Gwynne Matt Miller |
| 40 | **CONSTRUCTION PLANS and SPECS** | Transmit Construction Plan Revisions Reflecting RFIs | As needed | Prior to work | Jhon Beltran Edwin Cortes | Michael Gwynne Matt Miller |
| 41 | **CONSTRUCTION PLANS and SPECS** | Transmit Released For Construction Specifications | As needed | Prior to work | Jhon Beltran Edwin Cortes | Michael Gwynne Matt Miller |
| | | | | | | |
| 42 | **UTILITIES** | Provide copy of all JPAs, Design-Build Agreements etc | As needed | 3 days prior to the work | Juan Hernandez | Michael Gwynne Matt Miller |

# Appendix 11.8

CEI PROCEDURES

# HNTB CEI Procedures

The purpose of this document is to describe the actions and activities to be performed by pertinent members of the CEI organization and the process by which the activities are verified. In general, CEI staff responsibilities can be grouped into tasks associated with inspection, materials, payroll/OJT compliance, project documentation, and project closeout.

HNTB is currently refining these procedures and processes, and anticipates revisions and/or updates to this section as the project progresses.

## INSPECTORS

Inspectors are primarily responsible for general inspection assignments and will assist Senior Inspectors in the performance of their duties. They receive general supervision from the Senior Inspectors who review the inspector's work while in progress.

### *Inspection*

It is a construction inspector's responsibility to verify and document that construction operations are performed in reasonable conformity with the contract documents through direct observation of ongoing construction operations, the examination of completed construction work, verification sampling and testing of materials, and the review of written and electronic records. The Inspector will produce required records to document the contract work produced by the Contractor and to monitor the time utilized by the labor and equipment resources involved in producing the contract work on a daily basis.

The following FDOT Manuals, procedures and guidelines will be utilized by the inspector to assist in carrying out their duties, as applicable.

(1) Basis of Estimates Handbook
(2) Manual on Uniform Traffic Control Devices (MUTCD)
(3) Project Engineers Handbook
(4) Design Standards (Typical Details)
(5) Online Florida Test Methods at the State Materials Office Website
(6) Statewide Inspection Guidelists
(7) Florida Stormwater, Erosion, and Sedimentation Control Inspections Manual
(8) Final Estimates Preparation and Documentation Manual
(9) Any applicable sections of Construction Project Administration Manual
(10) FDOT Construction Self-Study Training Manuals

If the Inspector observes contract work either in progress or completed that is not in conformance with the requirements of the contract documents, he will promptly notify the Senior Inspector and Contractor representative of the unacceptability of the work activity. Therefore, it is imperative for an Inspector to be knowledgeable in the requirements of the contract documents and applicable FDOT Manuals including:

(1) Specifications (including standard, supplemental, special provisions and technical special provisions);
(2) Plans and plan notes;
(3) Roadway Design and Structures Design standards;
(4) Contractor submitted operation plans (including Level I and II concrete quality control, pile and drilled shaft installation, etc.);
(5) Material design mixes;
(6) Computation book;
(7) Job materials guide schedule;
(8) Material sampling procedure publications;
(9) QA Guidelists;
(10) Basis of Estimates Manual.

Review of the QA guidelists, which are lists of the major requirements that Inspectors must utilize during the inspection of the contract work, are particularly important since they increase the inspector's awareness of the applicable contract document sections for a construction operation. At the end of each guidelist requirement a notation indicates the section and reference document or publication the user can find detailed information about the requirement.

Inspectors are required to record a variety of construction related information. This information is usually entered on preprinted forms; however, some of the information is recorded in project specific logs that must be prepared by the Inspector before any information is entered.

Inspectors must use a variety of devices and equipment in order to be able to do proper and accurate inspections. To make sure that all necessary equipment will be available during an inspection, an equipment checklist can be used prior to the start of each different type of construction operation, since the equipment required will vary with the type of operation. Verify that equipment requiring calibration is up to date.

Just prior to the start of a construction operation, the inspector should do a thorough review of the applicable contract documents and guidelists. Any specification or guidelist requirement that is not completely clear should be discussed with the Senior Inspector or Project Engineer/ Administrator and the specification covering the guidelist requirement should be studied. During the actual inspection of the Contractor's work, the inspector should refer to the guidelist often and may find it helpful to have a copy on his/her person at all times. As a general rule, the guidelist shall be referred to each time the Contractor performs an operation. When the operation is checked enough times to completely determine the Contractor's level of quality control, then judgment can be applied to whether to reduce the frequency of inspection. Before any decision to reduce the frequency of checking is put into effect, the Inspector should discuss this with the Senior Inspector or Project Engineer/Administrator. When the Contractor has completed an operation that could not be observed by the Inspector while the operation was underway, then the Inspector should check any available components of the operation as soon as possible.

## *Materials*

The inspector is responsible for performing verification sampling and testing of materials incorporated into the project. When the method of acceptance involves verification in the field, it will be accomplished in accordance with, but not limited to, the following FDOT Standard Specifications Sections:

120-10 Embankment: The CEI will conduct verification testing in accordance with this section.

125-9 and 125-10 Backfilling for Structures and Pipe: The CEI will conduct verification testing in accordance with these sections.

160-7 Stabilization: The CEI will conduct verification testing in accordance with this section.

327-3 Milling of Existing Asphalt Pavement: The CEI will conduct verification testing in accordance with this section.

334-5 Superpave Asphalt Concrete: The CEI will conduct verification testing in accordance with this section.

346-9 Portland Cement Concrete: The CEI will conduct verification testing in accordance with this section.

455 Structures Foundations: For driven pile, the CEI scope is limited to over-the-shoulder observation and documentation for test and production pile driving operations, which will include the contractor's conformance to the approved Pile Installation Plan. Verification testing of completed piles, as selected by the Department/OCEI, will be performed at the request of the Concessionaire by the CEI. The CEI shall not provide PDA services for the Verification testing phase of the foundation acceptance. For drilled shafts, the CEI scope is limited to observing and documenting the drilled shaft placement operations. For auger cast pile, the CEI scope is limited to observing and documenting the production pile casting.

548-7 Retaining Wall Systems: The CEI will conduct verification testing in accordance with this section.

## *Payroll/OJT Compliance*

The Inspector functions as the Resident Compliance Specialists eyes and ears in the field. The team of Inspectors is responsible for performing the following compliance related tasks in the field:

1) Obtain the appropriate number of labor interviews in the field depending on the number of active work zones on a monthly basis by using a random sampling of the contractor's labor force.

2) A Daily/Weekly Observation form for each of the Contractor's on-the-job trainees will be completed. At the end of the week, the form is to be signed by both the Inspector and Contractor's Supervisor/Superintendent. The completed form is to be turned into the Resident Compliance Specialist on each Monday morning.

### *Project Documentation*

The Inspector must enter the Daily Report of Construction information into SiteManager every day including each operation and location of construction that has been assigned. It is very important for the Daily Report of Construction to be filled out completely and accurately. In addition to the standard information that is required by the Daily Report of Construction, the following QC related information should be entered into the comments section of the form.

Contractor QC Lapses: The Inspector should record repeated lapses of the Contractor's QC. For example, if the Contractor has asked for a final inspection of deck rebars shortly before deck concrete placement, and if rebars have been placed incorrectly, then this should be discussed and corrected. If, after the first notification the same situation is observed, then this repeated infraction should be recorded on the Daily Report of Construction. The intent of this reporting is not to document minor isolated or infrequent lapses in QC, but to report repeated patterns of inadequate or poorly managed QC. One-time QC lapses should be reported only if they have major significance, such as causing delay or expense to the Contractor. This information on the Daily Report of Construction, documents that the Contractor's QC needs improvement and confirms that the Concessionaire's inspection was effective with regard to identifying Contractor QC lapses.

### *Project Acceptance*

The Inspector is responsible for maintaining a list of known non-compliance items on an ongoing basis and reporting these to the Senior Inspectors. Once these non-compliance items are corrected/ resolved then they will be removed from the inspector's list. Up to date record keeping and resolution monitoring throughout the construction process will greatly facilitate the final inspection and punchlist process.

## SENIOR INSPECTOR

The Senior Inspectors are responsible for the quality of the work performed by the inspection staff. They are responsible for performing highly complex technical assignments, making, and checking engineering computations, inspecting construction work, conducting field tests and coordinating and managing the Inspectors. The Senior Inspector's work is performed under the general supervision of the Project Engineer/Administrator.

## *Inspection*

The Senior Inspectors are responsible for coordinating the inspection efforts of the inspection staff. This coordination will include scheduling available inspection resources to provide adequate coverage of the contractor's planned activities. They will also participate in inspection of the more complex aspects of the construction works including mass concrete, post tensioning, maintenance of traffic, etc. The Senior Inspector will monitor the contractor's compliance with permit provisions. The Senior Inspector will also assist the inspection staff in interpreting plans, specifications, and other contract documents when appropriate. They are responsible for reporting all non-compliance issues and deviations from the contract documents to the Project Engineers/Administrators. The Senior Inspector will also be responsible for documenting the effects of inclement weather on the contractor's operations.

- QA/Backcheck/Verification
    - The Senior Inspectors will verify on a daily basis that the Inspectors have available and are utilizing the necessary guidelists, plans, specifications, etc. during their inspection activities.

## *Materials*

The Senior Inspectors are responsible for coordinating the materials testing efforts of the inspection staff. This coordination will include scheduling available testing resources to provide adequate coverage of the contractor's materials placement activities. The Senior Inspectors will monitor the contractor's QC activities to maintain an adequate frequency of verification testing. The Senior Inspector will also report on all materials incorporated into the project along with documentation (e.g. delivery tickets, certifications, etc.) verifying its origin and quality. Specific emphasis will be placed on Buy America certifications for all steel products permanently incorporated into the work.

- QA/Backcheck/Verification
    - The Senior Inspectors will verify on a daily basis that the Inspectors have available and are utilizing the necessary calibrated equipment necessary to perform materials testing.
    - The Senior Inspectors will verify on a daily basis that the Inspectors are utilizing the correct FDOT, ACI, ASTM, etc. test method for each test performed.

## *Payroll/OJT Compliance*

- QA/Backcheck/Verification

- The Senior Inspectors will verify on a monthly basis that the team of Inspectors has taken the required number of labor interviews.
- The Senior Inspector will verify on a weekly basis that the inspectors are tracking the on-the-job trainees assigned to them.

### *Project Documentation*

The Senior Inspector must enter the Daily Report of Construction information into SiteManager every day including each operation and location of construction that has been assigned. Upon approval of the Project Engineer/Administrator the Senior Inspector will approve the Daily Report of Construction in SiteManager for the Inspectors that they supervise.

- QA/Backcheck/Verification
  - The Senior Inspectors will review the inspector's daily reports of construction on a daily basis for completeness and verify that all observations of the contractor's operations have been documented.

### *Project Acceptance*

The Senior Inspectors will be responsible for performing the final inspection and generating the punchlists/checklists for all completed project components. These punchlists/checklists will be furnished to the Contractor and Concessionaire in sufficient time to allow for their resolution prior to the 60-day notification to the Department by the Concessionaire of the anticipated completion of the project to assist with the review and acceptance of the project by the Department/OCEI/Maintaining Agency.

## Senior Project Engineers/Project Administrators Road and Bridge

The Senior Project Engineer/Project Administrator receives general instructions regarding assignments from the Resident Engineer and is expected to exercise initiative and independent judgment in the solution of work problems. Directs and assigns specific tasks to Senior Inspectors and assists in all phases of the construction project. They also work with the inspection staff to ensure uniformity, timeliness, and quality of field services performed.

### *Inspection*

The Senior Project Engineers/Project Administrators will supervise the Senior Inspection staff in executing their duties. They will also participate in the inspection of complex and or specialized elements of the work. The Senior Project Engineers/Project Administrators are responsible for interpreting the contract plans and specifications and observe their proper implementation in the

field. They are also responsible for staying abreast of and disseminating the latest applicable FDOT guidance on relevant items to the field staff.

- QA/Backcheck/Verification
    - The Senior Project Engineers/Project Administrators will verify on a regular basis that the inspection staff have available and are utilizing the necessary guidelists, plans, specifications, etc. during their inspection activities. This verification will include random checks on the quality and timeliness of the inspection being performed by the inspection staff.

## *Materials*

Regardless of the method of acceptance, it is the Senior Project Engineer's/Project Administrator's responsibility to assure that only materials meeting the specifications, or properly documented and approved exceptions, are incorporated into the project.

- QA/Backcheck/Verification
    - The Senior Project Engineer/Project Administrator will verify on a random basis that the inspection staff have available and are utilizing the necessary calibrated equipment necessary to perform materials testing.
    - The Senior Project Engineer/Project Administrator will verify on a random basis that the inspection staff is utilizing the correct FDOT, ACI, ASTM, etc. test method for each test performed.
    - The Senior Project Engineer/Project Administrator will verify on a weekly basis that materials testing and documentation is being performed at an appropriate frequency in the field and verifying the completeness of the contractor's QC efforts.

## *Payroll/OJT Compliance*

- QA/Backcheck/Verification
    - The Senior Project Engineers/Project Administrators will verify on a weekly basis that no contractors are working on site without proper notification from the Prime Contractor.

## *Project Documentation*

The Senior Project Engineers/Project Administrators are responsible for the quality and completeness of all project records and documentation necessary for FDOT. This documentation includes:

1) Preparation of a Weekly Summary of construction activities for the Concessionaire.
2) Receive and verify the contractor's weekly submittal of the MOT Review Report in accordance with CPAM section 9.1.8, as applicable.
3) Receive and verify the contractor's weekly submittal of NPDES records in accordance with CPAM section 8.2.10, as applicable.
4) Receive and review the contractor's Work Plan Controlling Item of Work form in accordance with CPAM section 5.1.6.3, as applicable.
5) Document and disseminate Construction Zone Accident Reports in accordance with CPAM Section 9.3.5, as applicable.
6) Maintain an up to date "as built" plan set for works under their supervision.

- QA/Backcheck/Verification

    - The Senior Project Engineer/Project Administrator will review the Inspector's and Senior Inspector's Daily Report of Construction in SiteManager on a weekly basis for completeness and verifies that all of the Contractor's operations have been documented.

    - Review and approve the Daily Report of Construction for the Senior Inspectors and any Inspector's that have not already been approved in SiteManager.

### *Project Acceptance*

The Senior Project Engineer/Project Administrator will assemble the final punchlist for the project and provide it to the Contractor. They will also monitor the contractor's punch out activities and verify all outstanding items have been addressed.

- QA/Backcheck/Verification

    - The Senior Project Engineer/Project Administrator will review the Senior Inspector's punchlists for completeness and relevancy.

    - The Senior Project Engineer/Project Administrator will review the Senior Inspector's punchlist by performing a field review of random sections of the work to ensure quality.

## MATERIALS PROJECT ADMINISTRATOR

The Materials Project Administrator is responsible for the completeness and accuracy of the project's records and documentation including materials testing and reporting. They exercise

independent judgment in planning work details and making technical decisions related to the office aspects of the project. They are familiar with the Department's Procedures covering the project related duties as stated above and be proficient in the computer programs necessary to perform these duties including SiteManager and LIMS.

## *Inspection*

The Materials Project Administrator will review the Contractor's Quality Control Plan and updates in accordance with FDOT Specification Section 105, and will assist the OCEI/FDOT's Materials Office review and approval, as necessary.

- QA/Backcheck/Verification
    - The Materials Project Administrator will review the inspection staff records to ensure all necessary project documentations including FDOT checklists, reports, forms, and certification are collected and/or created for all applicable project elements per the approved Job Guide Schedule.

## *Materials*

The Materials Project Administrator is responsible for the project's final materials certification. The Materials Project Administrator verifies that the sampling and testing required by the project's Sampling, Testing and Reporting Guide (STRG), is performed at the required frequency and documented in LIMS. A Job Guide Schedule (JGS) based on the STRG is developed by the Contractor for each zone and will be reviewed regularly by the Materials Project Administrator. The JGS includes the required sampling and testing frequencies, as well as the material numbers, which designate the method of acceptance for each material type. It is also the Materials Project Administrator's responsibility to track all failing/defective material samples to resolution. Defective materials will be processed in accordance with the DDM process that is currently under development by the Department. Once it has been approved by the Department and Concessionaire, then it will be incorporated into the contract and become the process for the CEI to use for defective materials.

- QA/Backcheck/Verification
    - The Materials Project Administrator will review the contractor's QC materials sampling on a daily basis to verify compliance with the applicable CQC specifications. Notifications of QC samples or tests that are not in compliance will be provided to the Contractor on a periodic basis. Resolution of these deficiencies is solely the responsibility of the Contractor.
    - The Materials Project Administrator will review the inspection staff's verification sampling and testing methods on a daily basis to verify compliance with the appropriate techniques and frequency.

- The Materials Project Administrator will review the project's field progress on a weekly basis to verify that all materials being incorporated into the project are properly tested, verified and documented in LIMS.

### *Payroll/OJT Compliance*

Not applicable.

### *Project Documentation*

The Materials Project Administrator is responsible for maintaining a number of contract documents up to date. These include the following:

1) Receive and review the contractor's monthly Certificate of Compliance with Plans and Specifications.
2) Receive and verify the accuracy of the contractor's monthly update to the Job Guide Schedule.
3) Review the QC and VT sampling and testing status in LIMS on a daily basis.

### *Project Acceptance*

The Materials Project Administrator will coordinate with the Contractor to verify that all materials incorporated into the project are accepted and approved to achieve the final material acceptance.

## RESIDENT COMPLIANCE SPECIALIST

The Resident Compliance Specialist is responsible for verifying the contractor's adherence to EEO/AA laws and FDOT's DBE and OJT programs. They have the ability to analyze, collect, and evaluate documentation submittals, as well as take appropriate action when necessary as it relates to these programs.

### *Inspection*

Not Applicable

### *Materials*

Not Applicable

### *Payroll/OJT Compliance*

The Resident Compliance Specialist is responsible for maintaining the Project's EEO/OJT/DBE/Payroll records up to date and reviewing the information provided by the

Contractor. Their duties are to be performed in accordance with FDOT's EEO Construction Compliance Workbook. Specific areas of responsibility include:

1) Receive and review all DBE reporting requirements in accordance with Tables 1.7.6.1 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

2) Receive and review all EEO reporting requirements in accordance with Table 1.7.6.2 and 1.7.6.3 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

3) Receive and review all OJT reporting requirements in accordance with Table 1.7.6.4 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

4) Review all Payroll reporting requirements in the TRS Payroll System in accordance with Table 1.7.6.5 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

5) Receive and review the contractor's Monthly Certification of Compliance with EEO Provisions in accordance with Section 1.8.4 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

6) Perform a monthly review of the contractor's job site bulletin board for compliance with Section 4.2 of the EEO Construction Compliance Workbook, as applicable and modified for this project.

### *Project Documentation*

The requirements are noted in Payroll/OJT Compliance section above. In addition, the Resident Compliance Specialist is responsible for issuing Contract Deficiency Communications on an as-needed basis to the contractor in order to identify and track all violations and deficiencies through resolution.

### *Project Acceptance*

The Resident Compliance Specialist is responsible for reviewing all compliance related information on an on-going basis. All outstanding items will be tracked to resolution with the goal of zero outstanding documents at project completion.

## RESIDENT ENGINEER

The Resident Engineer is responsible for coordinating all of the CEI related activities on the contract. They direct highly complex and specialized construction engineering administration

and inspection programs; plan and organize the work of subordinate staff members; develop and/or review policies, methods, practices, and procedures; and review programs for conformance with Department standards and the Contract Documents, as applicable. The Resident Engineer will also coordinate and attend all of the project construction related meetings.

## *Inspection*

- QA/Backcheck/Verification
    - On a regular basis verify the timeliness and quality of all inspection related activities on the project as they relate to the project's scope.

## *Materials*

- QA/Backcheck/Verification
    - On a regular basis verify the timeliness and quality of all materials sampling and testing related activities as they relate to the project's scope.

## *Payroll/OJT Compliance*

- QA/Backcheck/Verification
    - On a regular basis verify the timeliness and quality of all Resident Compliance related activities as they relate to the project's scope. This will be accomplished by performing and/or assigning additional project staff to check the accuracy of the Resident Compliance records, as necessary.

## *Project Documentation*

The Resident Engineer is responsible for the following documentation related items on the contract:

1) Prepare a monthly summary of the project's progress and submit it to the Concessionaire.
2) Distribute and track alleged non-payment correspondence from sub contractors.
3) Sign and Seal any of the project's final as-built plan sheets to reflect modifications and/or changes directed by the Resident Engineer to the Contractor.
4) Review the status of the project's final as-built plans on a monthly basis that are being prepared by the EOR.

- QA/Backcheck/Verification

- On a regular basis verify the timeliness and quality of the Senior Project Engineer's/Project Administrator's documentation responsibilities.
- On a regular basis verify the timeliness and quality of the Materials Project Administrator's documentation responsibilities.
- On a regular basis verify the timeliness and quality of the Resident Compliance Specialist's documentation responsibilities.

## *Project Acceptance*

The Resident Engineer is ultimately responsible for ensuring that the all of the necessary CEI related project documentation is prepared timely and in accordance with the FDOT standards and/or the Contract Documents, as applicable. The goal is to turn in a final package with no open and/or missing items.

- QA/Backcheck/Verification
  - On a regular basis verify the timeliness and quality of the Senior Project Engineer's/ Project Administrator's final acceptance activities.
  - On a regular basis verify the timeliness and quality of the Materials Project Administrator's final acceptance activities.
  - On a regular basis verify the timeliness and quality of the Resident Compliance Specialist's final acceptance activities.

# Appendix 11.9

CEI PROCESSES

HNTB

# *HNTB CEI Processes*

Following please find the preliminary plan for the requirements outlined in I-595 RFP Volume II - Technical Requirements Division II, Section 3, Attachment 3 "Concessionaire Construction Engineering & Inspection Requirements". HNTB is currently refining these procedures and processes, and anticipates revisions and/or updates to this section as the project progresses.

## SECTION 1 – ITEMS TO BE FURNISHED BY THE CEI

A. Intentionally left blank.

B. Office Automation

HNTB shall maintain computers, software, and high speed internet access compatible with FDOT's requirements. All construction related documents generated by the Concessionaire's CEI shall be scanned and filed into FDOT's EDMS (Hummingbird) in accordance with FDOT procedures.

C. Field Office

HNTB will provide a furnished field office for its own forces in the vicinity of the project corridor. No office space shall be provided for personnel not working directly for the HNTB CEI team.

D. Vehicles

HNTB will provide vehicles for its field forces as necessary to carry out CEI duties required by this agreement. Vehicles will be equipped with the appropriate safety equipment. The vehicles shall have the name of the CEI Team visibly displayed on both sides of the vehicle.

E. Field Equipment

HNTB will provide the field equipment as necessary to perform CEI duties required by this agreement. The equipment will be maintained in working order at all times. Nuclear density gauges will be stored and operated in accordance with our state license for this equipment.

F. Licensing of Equipment

A Radioactive Materials License for use of Surface Moisture Density Gauges shall be obtained through the State of Florida Department of Health.

## SECTION 2 LIAISON ACTIVITIES

HNTB shall keep the Concessionaire and/or FDOT through the Concessionaire informed of all significant CEI activities, decisions, correspondence, reports, and other communications related to its responsibilities under this agreement. All CEI project records shall be made available to the Concessionaire and/or FDOT through the Concessionaire for audit. Significant activities include but are not limited to:

- HNTB shall perform traffic accident review and report in accordance with section 9.3 of the CPAM and/or the Contract Documents, as applicable. In the event of any accident that involves any fatality or hazardous material spill for which the CEI has received notification or has observed, the CEI will immediately notify the Concessionaire and the

OCEI. Communication protocol will involve immediate telephone calls, followed by e-mails and the appropriate reporting documentation.

- All Notifications of Intent to Claim submitted to HNTB will be processed in accordance with section 7.5 of the CPAM and/or the Contract Documents, as applicable. HNTB will document all field activities associated with any Intent to Claim and notify the Concessionaire and the OCEI when any Intent to Claim is received.
- Lane Closure Requests submitted by the Contractor shall be reviewed by the CEI for contract compliance and then forwarded to the OCEI for final approval and dissemination to the traveling public. All of the contractor's activities as they relate to traffic control shifts, lane closures, and detours shall be observed by the CEI during the initial set-up and periodically thereafter. HNTB shall review the contractor's weekly MOT Review Report and verify compliance with contract MOT requirements in accordance with Section 9.1 of the CPAM and/or the Contract Documents, as applicable. Any non-compliance with respect to Maintenance of Traffic will be immediately relayed to the Contractor and then reported to the Concessionaire and the OCEI. The manner in which the deficiency is reported will be related to its severity. Minor deficiencies will be documented on the Contractor's MOT Review Report or communicated by e-mail, as appropriate. Major discrepancies shall immediately addressed in the field to ensure the safety of the traveling public and shall be documented in letters to the Contractor, in discussions during the Weekly Construction Progress Meetings, and escalated as necessary.
- For all test and production pile driving operations, drill shaft operations, and auger cast pile placements, the CEI will provide the OCEI advanced notification via e-mail based on the Contractor's reported schedule. Time frames for notification will be in accordance with the contract documents.
- All Structural Repairs shall be inspected, documented and reported by HNTB in accordance with CPAM Section 10.3 for concrete and Section 10.9 for steel and/or the Contract Documents, as applicable. The CEI will provide notification to the OCEI of the Contractor's reported schedule to perform structural repairs both on-site and/or off-site via e-mail or in the Weekly Construction Progress Meeting.
- HNTB will assist the Concessionaire's Utility Coordination Manager to ensure all Utility Relocations are documented and reported in accordance with CPAM section 5.6. and/or the Contract Documents, as applicable. The CEI will provide notification to the OCEI of the Contractor's reported schedule to perform utility relocations via e-mail or in the Weekly Construction Progress Meeting.
- Mass Concrete Pours and Post Tensioning and Grouting activities shall be inspected and documented by HNTB in accordance with CPAM Section 10.3, Section 10.7, and/or the Contract Documents, as applicable. The CEI will provide notification to the OCEI of the Contractor's reported schedule to perform Mass Concrete Placements and Post Tensioning and Grouting activities via e-mail or in the Weekly Construction Progress Meeting.
- All Bridge Maintenance painting and blasting or painting preparation activities for structural steel and concrete surfaces shall be inspected, documented, and reported by HNTB in accordance with FDOT procedures and the Contract Documents, as applicable. The CEI will provide notification to the OCEI of the Contractor's reported schedule to

perform painting or blasting activities via e-mail or in the Weekly Construction Progress Meeting. Similar notification will be provided for all off-site activities.

- HNTB shall inspect, document, and report all items that may require Witness Points and Hold Points in accordance with FDOT requirements. The OCEI shall be notified via e-mail or at the Weekly Construction Progress Meeting of planned Witness and Hold Point activity. When present the CEI will not permit work to continue until specific activities requiring FDOT review have been conducted
- Upon discovery of buried tanks, containers containing unknown materials, unanticipated contaminated or hazardous materials, or unanticipated human remains, the CEI shall halt the Contractor's activities within the vicinity of the affected area, document the existing conditions and notify the Concessionaire and the OCEI. Communication protocol will involve immediate telephone calls, followed by e-mails and the appropriate reporting documentation.
- Planned removal, handling, labeling, transportation and disposal of contaminated or hazardous materials shall be reported by HNTB to the Concessionaire and the OCEI via e-mail or in the Weekly Construction Progress Meeting based on information provided by the Contractor. Unauthorized activities of this nature will be stopped by the CEI and the Concessionaire and the OCEI will be immediately notified.
- Permit modification, design changes, and additional right-of-way needs that may require a re-evaluation by NEPA shall not be coordinated by the CEI. Those responsibilities will be addressed by the Concessionaire, the Contractor, and/or their Engineer of Record as appropriate.

## SECTION 3 – PERFORMANCE OF THE CEI

HNTB shall perform internal QA audits in accordance with the QA Plan currently on file with the Concessionaire. HNTB has established a project specific QA Team comprised of senior corporate representatives responsible for the implementation of the QA Plan and the performance of project audits or reviews. QA Review findings will be documented and shared with the Concessionaire within the time frame outlined by the QA Plan. HNTB's records will be made available, and the CEI Team will assist the Concessionaire during audits or reviews conducted by Department representatives based on the frequency required by FDOT policy on QA reviews of CEI activities. Based on the findings of the QA Audit, or notification from the Department/OCEI, remedial actions regarding personnel performance will be implemented in a timely manner in accordance with Volume II -Technical Requirements Division II, Section 3, Attachment 3 of the Contract.

## SECTION 4 - REQUIREMENTS

A. General

HNTB shall monitor of the contractor's activities and document that the Project is constructed in reasonable conformity with the plans, specifications, and special provisions set forth in the Contract Documents.

HNTB shall observe the Contractor's work to verify the progress and quality of the work, identify discrepancies, report significant discrepancies to the Concessionaire and/or FDOT and direct the Contractor to correct such observed discrepancies. HNTB shall advise the OCEI, through the Concessionaire, of omissions, defects, and deficiencies noted in the work of the

Contractor and the corrective action that has been performed by the Contractor. As these issues occur they will be captured and tracked through the use of Non-Conformity Reports (NCRs) compiled by the CEI and transmitted to the Contractor, copying the Concessionaire. The NCRs will be issued within 24 hours of the event and tracking logs will identify each NCR pertaining to the Prime Contractor and each of their Sub-Contractors using unique alpha numeric codes. The NCRs will be summarized in the Project Weekly Report provided to the Concessionaire and the OCEI. The tracking logs will be provided to the OCEI monthly or upon request.

Significant omissions, defects, and deficiencies or substitutions as a result of non-compliant work performed by the Contractor will be self-reported by the Concessionaire to the Department in accordance with the Concession Agreement.

All significant field changes, RFIs, structural repairs, and/or Field Change Requests shall be incorporated into the final as-built drawings for the project by the Contractor and/or the Engineer of Record. HNTB shall meet on a monthly basis with the Contractor to monitor the status of this process, and on a quarterly basis to review the as-builts being compiled by the Contractor and/or the Engineer of Record to verify applicable revisions and/or modifications have been adequately captured on the as-built plans. The final as-builts will be collected from the Contractor by HNTB and submitted along with the Final Estimates package.

B. On Site/Off Site Inspection

HNTB shall monitor the Contractor's on-site construction activities and inspect the materials entering into the work to verify the Project is constructed in reasonable conformity with the plans, specifications, and special provisions set forth in the Contract Documents. HNTB shall keep detailed, accurate records of the Contractor's daily operations, as well as significant events that affect the work. HNTB shall review the contract documents, prepare all necessary records and checklists, observe construction operations, perform verification sampling and testing, and document all inspections in accordance with section 3.2 of the CPAM and/or the Contract Documents, as applicable. HNTB shall document all construction activities utilizing the Daily Work Report, which will be input into FDOT’s Site Manager system in accordance with Section 5.1 of the CPAM and/or the Contract Documents, as applicable.

HNTB shall assist the Concessionaire with the monitoring and inspection of the work zone traffic control plan and any approved modifications. HNTB shall review the contractor’s weekly MOT review report and verify compliance with contract MOT requirements in accordance with section 9.1 of the CPAM.

As part of the contract requirements HNTB shall perform off-site fabrication inspection for the following categories of project components: manufactured incidental pre-cast/pre-stressed elements (MSE Wall Panels, Sound Wall Panels, etc), pre-cast/pre-stressed products (Piling, Girders, etc.), structural steel fabrication, and asphalt plant verification inspection. Off-site inspections will be conducted in accordance with the verification responsibilities outlined in the FDOT Materials Manual, the CPAM, and the Contract Documents, as applicable.

C. Sampling and Testing

HNTB shall perform Verification sampling and testing of component materials and completed work in accordance with the Department’s Materials Manual, the Sampling, Testing and Reporting Guide,

the Job Guide Schedule developed by the Contractor, and Standard Specifications. HNTB shall verify the acceptability of all materials and completed work items on the basis of test results, certifications, certified mill analysis, DOT stamp, etc. Sampling, testing and laboratory methods shall be as required by the Department's Standard Specifications, Supplemental Specifications or as modified by the Special Provisions of the Contract. HNTB shall be responsible for transporting samples in accordance with Department requirements to be tested in a Department certified laboratory. HNTB shall input verification testing information and data into the Department's database, Laboratory Information Management Systems (LIMS). A Weekly Sampling and Testing Report reflecting a summary of material sampling and testing activities including a status update of LIMS shall be submitted to the Concessionaire and the OCEI each Monday reflecting the previous week.

D. Engineering Services

HNTB shall perform the following:

1. Schedule and attend, within 21 days after HNTB's NTP, a pre-service conference for the Project.
2. Schedule within ten (10) days after HNTB's NTP, a date to attend a meeting with the District Compliance Manager prior to the Pre-construction Conference. HNTB shall provide appropriate staff to attend and participate in this meeting.
3. Prepare and submit to the Construction Project Manager for approval, within thirty (30) days after the pre construction meeting, the FDOT Computer Security Access Request for use of FDOT Data Center Facilities and access to the Department's computer systems.
4. Schedule within ten (10) days after HNTB's NTP, a date to attend a Site Manager/EDMS informational meeting with the District Construction Office. HNTB shall provide appropriate staff to attend and participate in this meeting.
5. HNTB shall schedule and conduct a meeting with the District Construction Environmental Liaison within 21 days after HNTB's NTP and another meeting at least forty-five (45) days prior to project Final Acceptance. The purpose of the meetings is to discuss the required documentation, including as-builts, necessary for permit(s) environmental compliance.
6. HNTB shall verify that the Contractor is conducting inspections, preparing reports and monitoring all storm water pollution prevention measures associated with the Project in accordance with CPAM section 8.2. HNTB shall provide at least one inspector who has successfully completed the "Florida Storm water, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors".
7. HNTB will assist the Concessionaire's Utility Coordination Manager to ensure all Utility Relocations are documented and reported in accordance with CPAM Section 5.6 and/or the Contract Documents, as applicable.
8. HNTB shall monitor each Contractor and subcontractor's compliance with specifications and special provisions of the Contract in regard to payment of predetermined wage rates in accordance with CPAM section 5.4, as applicable. HNTB shall review certified payrolls via the TRS Payroll System and perform labor interviews in accordance with Section 5.4 of the CPAM and/or the Contract Documents, as applicable.
9. HNTB shall provide a Resident Compliance Specialist for surveillance of the Contractor's compliance with Contract requirements. The Resident Compliance Specialist is responsible for reviewing, monitoring, evaluating and acting upon documentation required for Contract compliance, and maintaining the appropriate files thereof. Typical areas of compliance responsibility include Equal Employment Opportunity (EEO) Affirmative Actions for the Prime Contractors and subcontractors, DBE Affirmative Action, Contractor's On the Job Training, Payroll, and Subcontracts. The Resident Compliance Specialist shall keep all related documents and

correspondence accurate and up to date; attend all compliance reviews, furnish the complete Project files for review, and assist the District Contract Compliance Manager as requested. These duties shall be performed in accordance with the Contract Documents.

10. Additional processes and procedures are currently under development, and will be refined based upon upcoming workshops with the Concessionaire, FDOT, OCEI, and the Contractor. Once agreed upon, these will be submitted to FDOT/OCEI through the Concessionaire for review and comment.

E. Geotechnical Engineering:

HNTB shall observe and document production pile driving operations; observe and document the drilled shaft placement operations; and observe and document auger cast pile placement. Pile PDA, production length selection, foundation certification, capacity verification, shaft CSL testing, and shaft video inspection shall be provided by others.

F. Utilities

HNTB will assist the Concessionaire's Utility Coordination Manager to ensure all Utility Relocations are documented and reported in accordance with CPAM section 5.6. and/or the Contract Documents, as applicable.

## SECTION 5 PERSONNEL

A. General Requirements

HNTB shall staff the Project with the qualified personnel necessary to efficiently and effectively carry out its responsibilities under this Agreement. Once authorized, HNTB shall establish and maintain an appropriate staff in accordance with the contract agreement. HNTB shall provide a Resident Engineer licensed as a professional engineer in the State of Florida and a lead roadway and lead bridge project administrator. In addition, inspection and administration staff will be assigned as necessary to provide the responsibilities stated in this document. Appendix 11.8 contains further explanation of the roles and responsibilities of CEI Personnel Staff loading levels are anticipated in accordance with the construction schedule provided on 3/4/09. In accordance to this schedule, staff will begin working on July 25th, 2009 through June 19th, 2014. In accordance with this schedule it is anticipated that staff levels will peak in the fall of 2010 and begin to decline in the Spring of 2012.

B. Personnel Qualifications

HNTB staff will be qualified in accordance with the Construction Training and Qualification Manual (700-000-001) for the duties they will be performing. HNTB maintains a training qualification matrix that reflects the current status of all qualifications and certifications of each CEI team member. As part of the QA Audit process and normal monthly checks conducted by the Project Administration staff, this matrix will be checked and contrasted against the personnel requirements outlined in the contract to ensure qualified personnel are provided.

## SECTION 6 FINAL ESTIMATES

The Concessionaire shall submit a final estimates package for the Construction Work within ninety (90) days after Final Acceptance. A materials certification will be provided with the submittal of the Final Estimates package. The following documents are currently anticipated to be included in the Final Estimate package, however modifications to this list may occur.

- As Built Record Plans
- Engineering reports (such as Load Rating, Foundation Construction Information, pile records, drill shaft records, etc.)
- Shop drawings
- All field and lab test results (as reported in LIMS)
- Warranties for equipment installed on the Project
- Certificate of Occupancy
- DRB invoices, DRB meeting minutes where applicable
- Estimates Office Record of Final Plans and Documents
- Design mixes
- Straight-edge reports
- Certification of pre-stressed items
- Final commercial inspection report
- Sign inspection report
- Complete disposition of defective materials
- Field Book containing all survey data, alignment, and bench mark checks
- Folder containing the following: Notice to Proceed Letter, Copies of letters granting extension of contract time, Begin and Final Notice, and documented adjustments to Contract Time, Interim Milestone Bonuses or Final Acceptance Payments

**Appendix 11.10**

O & M WORK PROGRAM

## O&M Work Program Schedule - All Construction Zones

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<July2009> | <<<<<<August 2009> | <<<<<<September2009> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **ROADWAY** | | | | | | | | |
| Flexible Pavement | Repair Asphalt Potholes | Inspect after Event and Repair Per Div II, Sect 6 | | | X | Inspect | Backlog Repairs | |
| **ROADSIDE** | | | | | | | | |
| Front Slope, Shoulders, Unpaved Ditch | Repair Slope Failures | Monitor and Maintain Per ME577 | X | | | Initial Inspection and Documentation of Backlog | Input WO Backlog to JAMS, Backlog Repairs | Backog Repairs, Backlog Repairs |
| Sidewalk | Repair Sidewalk Failures | Maintain Per Design Stds & Specs 502 &522, ME522 and MRP | X | | | Initial Inspection and Documentation of Backlog | Backlog Maintenance | Backog Maintenance |
| Right of Way Fence | Repair Fence | Monitor and Maintain Per Design Stds & Specs 550, ME 550 and MRP | | | X | Inspect | Backlog Repa, Backlog Repairs | Monthly Visual Inspection |
| **TRAFFIC SERVICES** | | | | | | | | |
| RPMs | Replace markers | Monitor, Maintain and Replace Per ME706 and MRP | X | | | Night Inspection of Current Condition | Backlog Maintenance | Backlog Maintenance |
| Long Lines | Renew Long Line Striping | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection of Current Condition | | Subcontractor Task Order for Backlog Repairs |
| Pavement Symbols | Renew Pavement Symbols | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection of Current Condition | | Subcontractor Task Order for Backlog Repairs |
| Guardrail | Repair/Maintain Guardrail | Monitor and Maintain Per Design Stds & Specs 536 | X | | X | June Complete Inspection to Verfiry Current Conditions | | |
| Attenuator | Repair/Maintain Attenuator | Monitor and Maintain Per Design Stds & Specs 544 | X | | X | June Complete Inspection to Verfiry Current Conditions | | |
| Small Signs Panels& Poles | Small Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Initial Inspection and Documentation of Backlog | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Large Signs | Large Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Initial Inspection and Documentation of Backlog | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Overlane Sign Structure | Maintain Ovhd/Cantilever Sign Struc. | Maintained per FDOT Design Standards and the Standard Specs or per Concessionaire's Design Criteria | | | X | Next maintenance is scheduled in fiscal year starting July 1, 2010. | | |
| Overlane Structures | Inspect and Repair as Needed | Inspect Per Procedure 850-010-030 or successor. | 2/ | | X | Next inspections are scheduled in fiscal year starting July 1, 2010. | | |
| Delineators/Object Markers | Replace Object Markers/Del & Posts | No requirement in table. Maintain to ensure there are no safety issues. | | | X | | | |
| Highway, Sign and Highmast Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | | Initial Inspection and Documentation of Backlog | Backlog Repairs | |
| Highmast Poles | Maintain high mast poles | Meet performance requirements in current FDOT Design Standards and Chap 7 Plans Prep. Manual | X | | | | | |
| Highmast Poles | Inspect and Repair HM Poles | Inspect Per Procedure 850-010-030 or successor. | 2/ | | | Next inspections are scheduled in fiscal year starting 2011. | | |
| Navagational Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | X | Inspect | | |
| **DRAINAGE** | | | | | | | | |
| Drainage Systems: Side Drain, Cross Drain, Outfall, Inlets, Paved Ditch, Misc. Drainage | Cleaning, Maintenance and Repair | Monitor and Maintain Per Design Stds & Specs 104 and MRP | X | | | Initial Inspection and Documentation of Backlog | | Schedule Backlog Repairs |
| Roadways and Bridges | Road and Bridge Sweeping | 12 Cycles Per ME110-31 | | X | | | Cycle 1 | Cycle 2 |
| NPDES Monitoring | Inspection | | | | X | | | |

**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<July2009> | <<<<<<August 2009> | <<<<<<September2009> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **VEGETATION/AESTHETICS** | | | | | | | | |
| Grass Areas | Full Cycle Mowing Large | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 1 | Cycle 2 |
| Grass Areas | Full Cycle Small Machine/Hand Mow | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 1 | Cycle 2 |
| Grass Areas | Full Cycle Slope Mowing | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 1 | Cycle 2 |
| Landscaping | Landscape Area Maintenance | See MMOA's | | | X | | | |
| Tree Trimming | Tree and Brush Removal | No requirement in table. Remove ROW encroachments or sign obstructions. | | | X | | | |
| Curb/Sidewalk Edging | Herbicide Spray | No requirement in table. Remove extreme unsightly conditions. | | | X | | | |
| Litter Removal | Full Cycle Litter Removal | 26 Cycles Per ME110-30 | | | | | | |
| **STRUCTURES** | | | | | | | | |
| Bridge Inspections | Perform Bridge Inspections | Perform per Procedure 850-010-030 | X | | | | Two Bridge Inspections | Seven Bridge Inspections |
| Bridge Work Orders | Complete Bridge Work Orders | Perform Repairs Generated from Bridge Inspections | X | | | | | Complete August Bridge Orders |
| Graffiti Removal | Removing Graffiti | Monitor and Maintain Painted Finish/Class 5 Application | | | X | | | |
| **OPERATION ACTIVITIES** | | | | | | | | |
| Corridor | Incident Reponse | Monitor and Respond | | | X | Respond as Needed | | |
| Corridor | Fuel Spills/Contamination | Inspect and Manage Cleanup | | | X | Respond as Needed | | |
| Corridor | TMC Opeations | Continually monitor per SOG | X | | | | | |
| Corridor | Road Ranger Operations | Respond to a stranded motorist, incident emergency or event | X | | | | | |

**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<October2009> | <<<<<<November2009> | <<<<December2009> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **ROADWAY** | | | | | | | | |
| Flexible Pavement | Repair Asphalt Potholes | Inspect after Event and Repair Per Div II, Sect 6 | | | X | | | |
| **ROADSIDE** | | | | | | | | |
| Front Slope, Shoulders, Unpaved Ditc | Repair Slope Failures | Monitor and Maintain Per ME577 | X | | | | | |
| Sidewalk | Repair Sidewalk Failures | Maintain Per Design Stds & Specs 502 &522, ME522 and MRP | X | | | | | Sidewalk Inspection |
| Right of Way Fence | Repair Fence | Monitor and Maintain Per Design Stds & Specs 550, ME 550 and MRP | | | X | Monthly Visual Inspection | Monthly Visual Inspection | Monthly Visual Inspection |
| **TRAFFIC SERVICES** | | | | | | | | |
| RPMs | Replace markers | Monitor, Maintain and Replace Per ME706 and MRP | X | | | Night Inspection / RPM Repairs as Needed | | |
| Long Lines | Renew Long Line Striping | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection / Subcontractor Task Order for Repairs | | |
| Pavement Symbols | Renew Pavement Symbols | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection / Subcontractor Task Order for Repairs | | |
| Guardrail | Repair/Maintain Guardrail | Monitor and Maintain Per Design Stds & Specs 536 | X | | X | | Semi-Annual Inspectio / Routine Maintenance | |
| Attenuator | Repair/Maintain Attenuator | Monitor and Maintain Per Design Stds & Specs 544 | X | | X | Quarterly inspection / Routine Maintenance | | |
| Small Signs Panels& Poles | Small Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Large Signs | Large Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Overlane Sign Structure | Maintain Ovhd/Cantilever Sign Struc. | Maintained per FDOT Design Standards and the Standard Specs or per Concessionaire's Design Criteria | | | X | | | |
| Maintain Sign Structures | Inspect and Repair as Needed | Inspect Per Procedure 850-010-030 or successor. | X | | X | | | |
| Delineators/Object Markers | Replace Object Markers/Del & Posts | No requirement in table. Maintain to ensure there are no safety issues. | | | X | | | |
| Highway, Sign and Highmast Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | | Quarterly Inspection and Maintenance | | |
| Highmast Poles | Maintain high mast poles | Meet performance requirements in current FDOT Design Standards and Chap 7 Plans Prep. Manual | X | | | Quarterly Inspection and Maintenance | | |
| Highmast Poles | Inspect and Repair HM Poles | Inspect Per Procedure 850-010-030 or successor. | 2/ | | | | | |
| Navagational Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | X | Quarterly Inspection and Maintenance | | |
| **DRAINAGE** | | | | | | | | |
| Drainage Systems: Side Drain, Cross Drain, Outfall, Inlets, Paved Ditch, Misc. Drainage | Cleaning, Maintenance and Repair | Monitor and Maintain Per Design Stds & Specs 104 and MRP | X | | | | | |
| Roadways and Bridges | Road and Bridge Sweeping | 12 Cycles Per ME110-31 | | X | | Cycle 3 | Cycle 4 | Cycle 5 |
| NPDES Monitoring | Inspection | | | | X | | | |

## O&M Work Program Schedule - All Construction Zones

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<October2009> | <<<<<<November2009> | <<<<December2009> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **VEGETATION/AESTHETICS** | | | | | | | | |
| Grass Areas | Full Cycle Mowing Large | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 3 | Cycle 4 | |
| Grass Areas | Full Cycle Small Machine/Hand Mow | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 3 | Cycle 4 | |
| Grass Areas | Full Cycle Slope Mowing | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 3 | Cycle 4 | |
| Landscaping | Landscape Area Maintenance | See MMOA's | | | X | | | |
| Tree Trimming | Tree and Brush Removal | No requirement in table. Remove ROW encroachments or sign obstructions. | | | X | | | |
| Curb/Sidewalk Edging | Herbicide Spray | No requirement in table. Remove extreme unsightly conditions. | | | X | | | |
| Litter Removal | Full Cycle Litter Removal | 26 Cycles Per ME110-30 | | X | | | | |
| **STRUCTURES** | | | | | | | | |
| Bridge Inspections | Perform Bridge Inspections | Perform per Procedure 850-010-030 | X | | | | Two Bridge Inspections | Seven Bridge Inspections |
| Bridge Work Orders | Complete Bridge Work Orders | Perform Repairs Generated from Bridge Inspections | X | | | Complete September Bridge Orders | | Complete November Bridge Orders |
| Graffiti Removal | Removing Graffiti | Monitor and Maintain Painted Finish/Class 5 Application | | | X | | | |
| **OPERATION ACTIVITIES** | | | | | | | | |
| Corridor | Incident Reponse | Monitor and Respond | X | | X | Respond as Needed | | |
| Corridor | Fuel Spills/Contamination | Inspect and Manage Cleanup | | | X | Respond as Needed | | |
| Corridor | TMC Opeations | Continually monitor per SOG | X | | | | | |
| Corridor | Road Ranger Operations | Respond to a stranded motorist, incident emergency or event | X | | X | | | |

**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<January2010> | <<<<February2010> | <<<<March2010> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **ROADWAY** | | | | | | | | |
| Flexible Pavement | Repair Asphalt Potholes | Inspect after Event and Repair Per Div II, Sect 6 | | | X | | | |
| **ROADSIDE** | | | | | | | | |
| Front Slope, Shoulders, Unpaved Ditc | Repair Slope Failures | Monitor and Maintain Per ME577 | X | | | | | |
| Sidewalk | Repair Sidewalk Failures | Maintain Per Design Stds & Specs 502 &522, ME522 and MRP | X | | | Sidewalk repairs | | Sidewalk Inspection |
| Right of Way Fence | Repair Fence | Monitor and Maintain Per Design Stds & Specs 550, ME 550 and MRP | | | X | Monthly Visual Inspection | Monthly Visual Inspection | Monthly Visual Inspection |
| **TRAFFIC SERVICES** | | | | | | | | |
| RPMs | Replace markers | Monitor, Maintain and Replace Per ME706 and MRP | X | | | Night Inspection; RPM Repairs as Needed | | |
| Long Lines | Renew Long Line Striping | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection; Subcontractor Task Order for Repairs | | |
| Pavement Symbols | Renew Pavement Symbols | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection; Subcontractor Task Order for Repairs | | |
| Guardrail | Repair/Maintain Guardrail | Monitor and Maintain Per Design Stds & Specs 536 | X | | X | Quarterly inspection; Routine Maintenance | | |
| Attenuator | Repair/Maintain Attenuator | Monitor and Maintain Per Design Stds & Specs 544 | X | | X | | | |
| Small Signs Panels& Poles | Small Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Large Signs | Large Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew | Routine Maintenance Sign Crew |
| Overlane Sign Structure | Maintain Ovhd/Cantilever Sign Struc. | Maintained per FDOT Design Standards and the Standard Specs or per Concessionaire's Design Criteria | | | X | | | |
| Overlane Structures | Inspect and Repair as Needed | Inspect Per Procedure 850-010-030 or successor. | X | | X | | | |
| Delineators/Object Markers | Replace Object Markers/Del & Posts | No requirement in table. Maintain to ensure there are no safety issues. | | | X | | | |
| Highway, Sign and Highmast Lightin | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | | Quarterly Inspection and Maintenance | | |
| Highmast Poles | Maintain high mast poles | Meet performance requirements in current FDOT Design Standards and Chap 7 Plans Prep. Manual | X | | | Quarterly Inspection and Maintenance | | |
| Highmast Poles | Inspect and Repair HM Poles | Inspect Per Procedure 850-010-030 or successor. | 2/ | | | | | |
| Navagational Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | X | Quarterly Inspection and Maintenance | | |
| **DRAINAGE** | | | | | | | | |
| Drainage Systems: Side Drain, Cross Drain, Outfall, Inlets, Paved Ditch, Misc. Drainage | Cleaning, Maintenance and Repair | Monitor and Maintain Per Design Stds & Specs 104 and MRP | X | | | | | |
| Roadways and Bridges | Road and Bridge Sweeping | 12 Cycles Per ME110-31 | | X | | Cycle 6 | Cycle 7 | Cycle 8 |
| NPDES Monitoring | Inspection | | | | X | | | |

**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<January2010> | <<<<February2010> | <<<<March2010> |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **VEGETATION/AESTHETICS** | | | | | | | | |
| Grass Areas | Full Cycle Mowing Large | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 5 | Cycle 6 |
| Grass Areas | Full Cycle Small Machine/Hand Mow | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 5 | Cycle 6 |
| Grass Areas | Full Cycle Slope Mowing | 10 Cycles, no more than once per month Per ME104-40 | | X | | | Cycle 5 | Cycle 6 |
| Landscaping | Landscape Area Maintenance | See MMOA's | | | X | | | |
| Tree Trimming | Tree and Brush Removal | No requirement in table. Remove ROW encroachments or sign obstructions. | | | X | | | |
| Curb/Sidewalk Edging | Herbicide Spray | No requirement in table. Remove extreme unsightly conditions. | | | X | | | |
| Litter Removal | Full Cycle Litter Removal | 26 Cycles Per ME110-30 | | X | | | | |
| **STRUCTURES** | | | | | | | | |
| Bridge Inspections | Perform Bridge Inspections | Perform per Procedure 850-010-030 | X | | | Three Bridge Inspections | Three Bridge Inspections | Two Bridge Inspections |
| Bridge Work Orders | Complete Bridge Work Orders | Perform Repairs Generated from Bridge Inspections | X | | | Complete December Bridge Orders | Complete January Bridge Orders | Complete February Bridge Orders |
| Graffiti Removal | Removing Graffiti | Monitor and Maintain Painted Finish/Class 5 Application | | | X | | | |
| **OPERATION ACTIVITIES** | | | | | | | | |
| Corridor | Incident Reponse | Monitor and Respond | X | | X | **Respond as Needed** | | |
| Corridor | Fuel Spills/Contamination | Inspect and Manage Cleanup | | | X | **Respond as Needed** | | |
| Corridor | TMC Opeations | Continually monitor per SOG | X | | | | | |
| Corridor | Road Ranger Operations | Respond to a stranded motorist, incident emergency or event | X | | X | | | |

**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<April2010> | <<<<<<May2010> | <<<<<<June2010 |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **ROADWAY** | | | | | | | | |
| Flexible Pavement | Repair Asphalt Potholes | Inspect after Event and Repair Per Div II, Sect 6 | | | X | | | |
| **ROADSIDE** | | | | | | | | |
| Front Slope, Shoulders, Unpaved Ditch | Repair Slope Failures | Monitor and Maintain Per ME577 | X | | | | | |
| Sidewalk | Repair Sidewalk Failures | Maintain Per Design Stds & Specs 502 &522, ME522 and MRP | X | | | **Sidewalk Repairs** | | **Sidewalk Inspection** |
| Right of Way Fence | Repair Fence | Monitor and Maintain Per Design Stds & Specs 550, ME 550 and MRP | | | X | **Monthly Visual Inspection** | **Monthly Visual Inspection** | **Monthly Visual Inspection** |
| **TRAFFIC SERVICES** | | | | | | | | |
| RPMs | Replace markers | Monitor, Maintain and Replace Per ME706 and MRP | X | | | Night Inspection **RPM Repairs as Needed** | | |
| Long Lines | Renew Long Line Striping | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection **Subcontractor Task Order for Repairs** | | |
| Pavement Symbols | Renew Pavement Symbols | Monitor, Maintain and Replace Per MRP | X | | | Night Inspection **Subcontractor Task Order for Repairs** | | |
| Guardrail | Repair/Maintain Guardrail | Monitor and Maintain Per Design Stds & Specs 536 | X | | X | **Semi-Annual Inspection** **Routine Maintenance** | | |
| Attenuator | Repair/Maintain Attenuator | Monitor and Maintain Per Design Stds & Specs 544 | X | | X | **Quarterly inspection** **Routine Maintenance** | | |
| Small Signs Panels& Poles | Small Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | **Routine Maintenance Sign Crew** | **Routine Maintenance Sign Crew** | **Routine Maintenance Sign Crew** |
| Large Signs | Large Sign Maintenance | Monitor and Maintain Per Design Stds & Specs 700 | X | | X | **Routine Maintenance Sign Crew** | **Routine Maintenance Sign Crew** | **Routine Maintenance Sign Crew** |
| Overlane Sign Structure | Maintain Ovhd/Cantilever Sign Struc. | Maintained per FDOT Design Standards and the Standard Specs or per Concessionaire's Design Criteria | | | X | | | |
| Overlane Structures | Inspect and Repair as Needed | Inspect Per Procedure 850-010-030 or successor. | X | | X | | | |
| Delineators/Object Markers | Replace Object Markers/Del & Posts | No requirement in table. Maintain to ensure there are no safety issues. | | | X | | | |
| Highway, Sign and Highmast Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | | **Quarterly Inspection and Maintenance** | | |
| Highmast Poles | Maintain high mast poles | Meet performance requirements in current FDOT Design Standards and Chap 7 Plans Prep. Manual | X | | | **Quarterly Inspection and Maintenance** | | |
| Highmast Poles | Inspect and Repair HM Poles | Inspect Per Procedure 850-010-030 or successor. | 2/ | | | | | |
| Navagational Lighting | Replace Lighting Luminaires | Monitor and Maintain Per ME715-50 and Chap 7 Plans Preparation Manual | X | | X | **Quarterly Inspection and Maintenance** | | |

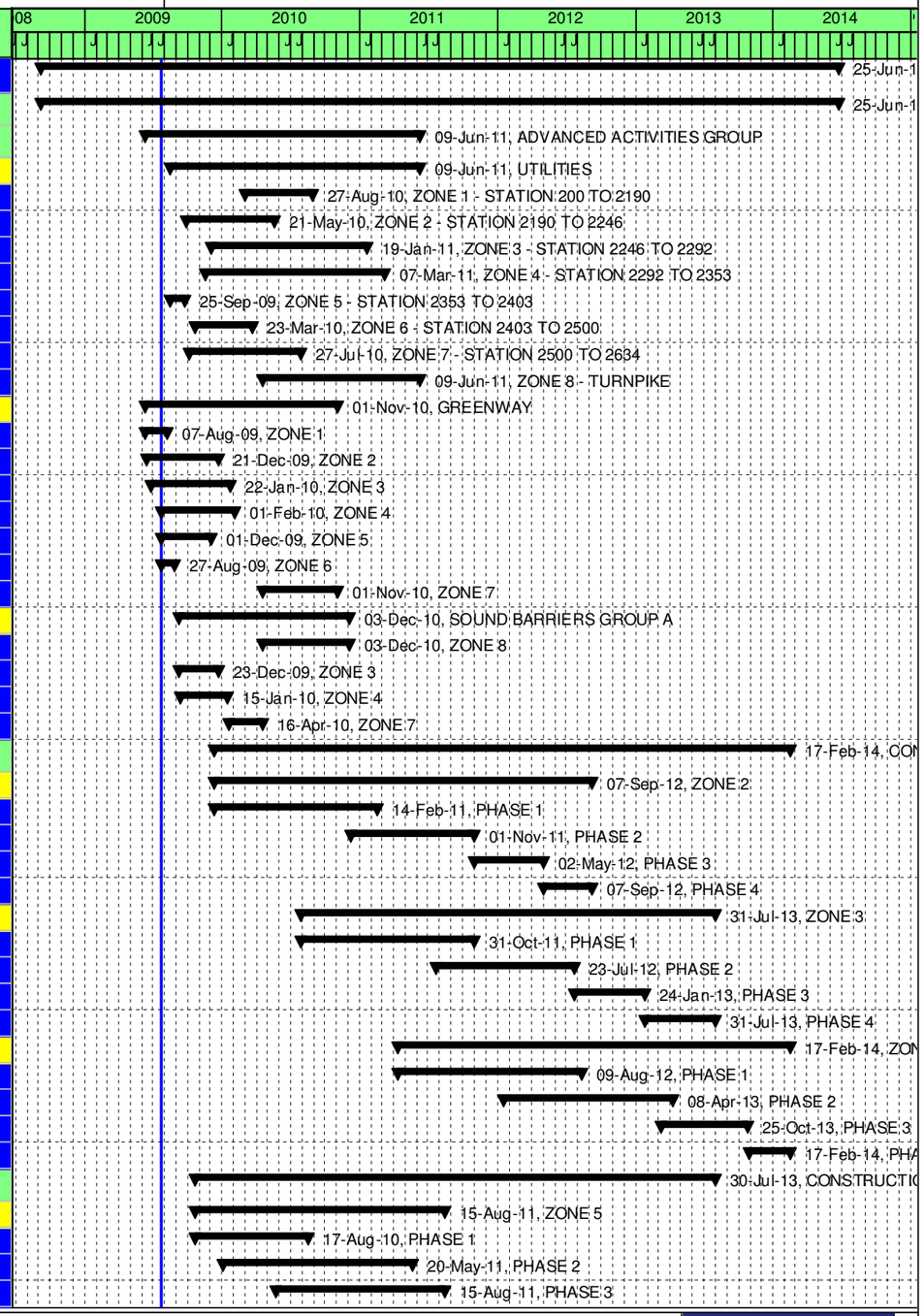
**O&M Work Program Schedule - All Construction Zones**

| Asset Category/Element | O&M Activity | Table 4.1 A. | Planning Basis | | | <<<<<<April2010> | <<<<<<May2010> | <<<<<<June2010 |
|---|---|---|---|---|---|---|---|---|
| | | | Program | Cyclic | As Needed | | | |
| **DRAINAGE** | | | | | | | | |
| Drainage Systems: Side Drain, Cross Drain, Outfall, Inlets, Paved Ditch, Misc. Drainage | Cleaning, Maintenance and Repair | Monitor and Maintain Per Design Stds & Specs 104 and MRP | X | | | | | |
| Roadways and Bridges | Road and Bridge Sweeping | 12 Cycles Per ME110-31 | | X | | Cycle 9 | Cycle 10 | Cycle 11 |
| NPDES Monitoring | Inspection | | | | X | | | |
| **VEGETATION/AESTHETICS** | | | | | | | | |
| Grass Areas | Full Cycle Mowing Large | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 7 | Cycle 8 | Cycle 9 |
| Grass Areas | Full Cycle Small Machine/Hand Mow | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 7 | Cycle 8 | Cycle 9 |
| Grass Areas | Full Cycle Slope Mowing | 10 Cycles, no more than once per month Per ME104-40 | | X | | Cycle 7 | Cycle 8 | Cycle 9 |
| Landscaping | Landscape Area Maintenance | See MMOA's | | | X | | | |
| Trees | Tree and Brush Removal | No requirement in table. Remove ROW encroachments or sign obstructions. | | | X | | | |
| Curb/Sidewalk Edging | Herbicide Spray | No requirement in table. Remove extreme unsightly conditions. | | | X | | | |
| Litter Removal | Full Cycle Litter Removal | 26 Cycles Per ME110-30 | | X | | | | |
| **STRUCTURES** | | | | | | | | |
| Bridge Inspections | Perform Bridge Inspections | Perform per Procedure 850-010-030 | X | | | One Bridge Inspection | | Four Bridge Inspections |
| Bridge Work Orders | Complete Bridge Work Orders | Perform Repairs Generated from Bridge Inspections | X | | | Complete March Bridge Orders | Complete April Bridge Orders | |
| Graffiti Removal | Removing Graffiti | Monitor and Maintain Painted Finish/Class 5 Application | | | X | | | |
| **OPERATION ACTIVITIES** | | | | | | | | |
| Corridor | Incident Reponse | Monitor and Respond | X | | X | Respond as Needed | | |
| Corridor | Fuel Spills/Contamination | Inspect and Manage Cleanup | | | X | Respond as Needed | | |
| Corridor | TMC Opeations | Continually monitor per SOG | X | | | | | |
| Corridor | Road Ranger Operations | Respond to a stranded motorist, incident emergency or event | X | | X | | | |

**Appendix 11.11**

DUSA PROJECT SCHEDULE SUMMARY

| Activity ID | Activity Name | Performance % Complete | Original Duration | Remaining Duration | Total Float | Early Start | Actual Start | Early Finish | Actual Finish |
|---|---|---|---|---|---|---|---|---|---|
| | **INTERSTATE 595 - Design & Construction S...** | 0% | 2120 | 1797 | 0 | 25-Jul-09 | 05-Sep-08 | 25-Jun-14 | |
| | **PRECONSTRUCTION** | 0% | 2120 | 1797 | 0 | 25-Jul-09 | 05-Sep-08 | 25-Jun-14 | |
| | **ADVANCED ACTIVITIES GROUP** | 0% | 729 | 683 | 1022 | 25-Jul-09 | 11-Jun-09 | 09-Jun-11 | |
| | **UTILITIES** | 0% | 665 | 665 | 945 | 14-Aug-09 | | 09-Jun-11 | |
| | **ZONE 1 - STATION 200 TO 2190** | 0% | 180 | 180 | 584 | 01-Mar-10 | | 27-Aug-10 | |
| | **ZONE 2 - STATION 2190 TO 2246** | 0% | 236 | 236 | 1049 | 28-Sep-09 | | 21-May-10 | |
| | **ZONE 3 - STATION 2246 TO 2292** | 0% | 415 | 415 | 450 | 01-Dec-09 | | 19-Jan-11 | |
| | **ZONE 4 - STATION 2292 TO 2353** | 0% | 477 | 477 | 519 | 16-Nov-09 | | 07-Mar-11 | |
| | **ZONE 5 - STATION 2353 TO 2403** | 0% | 43 | 43 | 1005 | 14-Aug-09 | | 25-Sep-09 | |
| | **ZONE 6 - STATION 2403 TO 2500** | 0% | 155 | 155 | 451 | 20-Oct-09 | | 23-Mar-10 | |
| | **ZONE 7 - STATION 2500 TO 2634** | 0% | 294 | 294 | 1262 | 07-Oct-09 | | 27-Jul-10 | |
| | **ZONE 8 - TURNPIKE** | 0% | 417 | 417 | 608 | 19-Apr-10 | | 09-Jun-11 | |
| | **GREENWAY** | 0% | 509 | 463 | 1242 | 25-Jul-09 | 11-Jun-09 | 01-Nov-10 | |
| | **ZONE 1** | 0% | 58 | 12 | 580 | 25-Jul-09 | 11-Jun-09 | 07-Aug-09 | |
| | **ZONE 2** | 0% | 189 | 148 | 449 | 25-Jul-09 | 16-Jun-09 | 21-Dec-09 | |
| | **ZONE 3** | 0% | 219 | 179 | 1518 | 27-Jul-09 | 26-Jun-09 | 22-Jan-10 | |
| | **ZONE 4** | 0% | 105 | 105 | 417 | 20-Oct-09 | 22-Jul-09 | 01-Feb-10 | |
| | **ZONE 5** | 0% | 127 | 127 | 475 | 27-Jul-09 | 22-Jul-09 | 01-Dec-09 | |
| | **ZONE 6** | 0% | 31 | 31 | 88 | 27-Jul-09 | 22-Jul-09 | 27-Aug-09 | |
| | **ZONE 7** | 0% | 197 | 197 | 1242 | 19-Apr-10 | | 01-Nov-10 | |
| | **SOUND BARRIERS GROUP A** | 0% | 451 | 451 | 1210 | 09-Sep-09 | | 03-Dec-10 | |
| | **ZONE 8** | 0% | 229 | 229 | 1210 | 19-Apr-10 | | 03-Dec-10 | |
| | **ZONE 3** | 0% | 106 | 106 | 449 | 09-Sep-09 | | 23-Dec-09 | |
| | **ZONE 4** | 0% | 127 | 127 | 426 | 11-Sep-09 | | 15-Jan-10 | |
| | **ZONE 7** | 0% | 87 | 87 | 1194 | 20-Jan-10 | | 16-Apr-10 | |
| | **CONSTRUCTION TEAM 1** | 0% | 1529 | 1529 | 39 | 11-Dec-09 | | 17-Feb-14 | |
| | **ZONE 2** | 0% | 1002 | 1002 | 566 | 11-Dec-09 | | 07-Sep-12 | |
| | **PHASE 1** | 0% | 431 | 431 | 946 | 11-Dec-09 | | 14-Feb-11 | |
| | **PHASE 2** | 0% | 327 | 327 | 686 | 10-Dec-10 | | 01-Nov-11 | |
| | **PHASE 3** | 0% | 183 | 183 | 694 | 02-Nov-11 | | 02-May-12 | |
| | **PHASE 4** | 0% | 128 | 128 | 340 | 03-May-12 | | 07-Sep-12 | |
| | **ZONE 3** | 0% | 1098 | 1098 | 240 | 29-Jul-10 | | 31-Jul-13 | |
| | **PHASE 1** | 0% | 460 | 460 | 92 | 29-Jul-10 | | 31-Oct-11 | |
| | **PHASE 2** | 0% | 368 | 368 | 190 | 22-Jul-11 | | 23-Jul-12 | |
| | **PHASE 3** | 0% | 184 | 184 | 203 | 24-Jul-12 | | 24-Jan-13 | |
| | **PHASE 4** | 0% | 188 | 188 | 240 | 24-Jan-13 | | 31-Jul-13 | |
| | **ZONE 4** | 0% | 1042 | 1042 | 39 | 12-Apr-11 | | 17-Feb-14 | |
| | **PHASE 1** | 0% | 486 | 486 | 131 | 12-Apr-11 | | 09-Aug-12 | |
| | **PHASE 2** | 0% | 448 | 448 | 270 | 17-Jan-12 | | 08-Apr-13 | |
| | **PHASE 3** | 0% | 229 | 229 | 153 | 11-Mar-13 | | 25-Oct-13 | |
| | **PHASE 4** | 0% | 112 | 112 | 39 | 28-Oct-13 | | 17-Feb-14 | |
| | **CONSTRUCTION TEAM 2** | 0% | 1380 | 1380 | 241 | 19-Oct-09 | | 30-Jul-13 | |
| | **ZONE 5** | 0% | 666 | 666 | 955 | 19-Oct-09 | | 15-Aug-11 | |
| | **PHASE 1** | 0% | 303 | 303 | 1318 | 19-Oct-09 | | 17-Aug-10 | |
| | **PHASE 2** | 0% | 502 | 502 | 1042 | 04-Jan-10 | | 20-May-11 | |
| | **PHASE 3** | 0% | 449 | 449 | 955 | 24-May-10 | | 15-Aug-11 | |

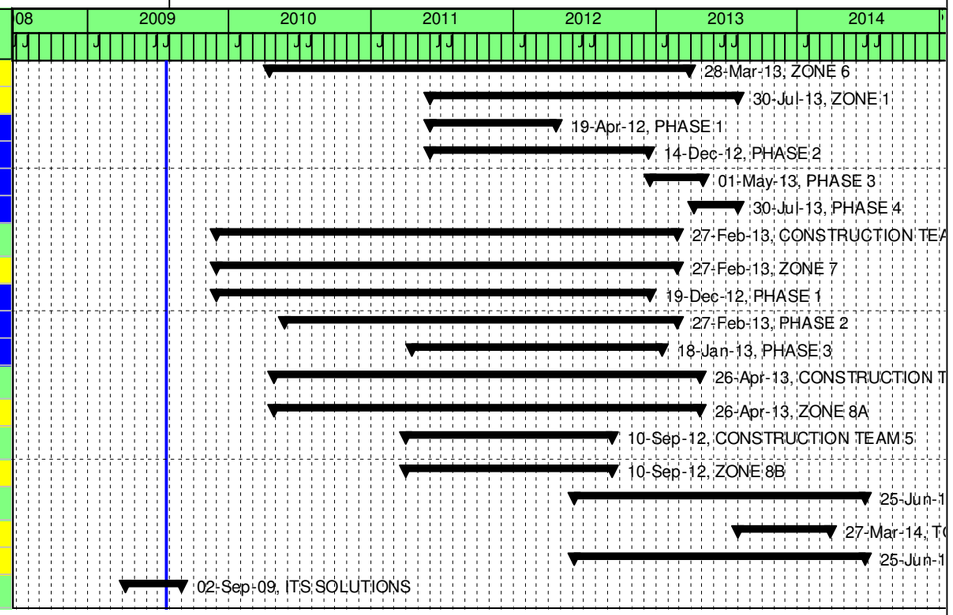



Remaining Level of Effort | Remaining Work | Summary
Actual Work | Milestone



DRAGADOS USA

| Activity ID | Activity Name | Performance % Complete | Original Duration | Remaining Duration | Total Float | Early Start | Actual Start | Early Finish | Actual Finish |
|---|---|---|---|---|---|---|---|---|---|
| ZONE 6 | | 0% | 1080 | 1080 | 365 | 13-Apr-10 | | 28-Mar-13 | |
| ZONE 1 | | 0% | 790 | 790 | 241 | 01-Jun-11 | | 30-Jul-13 | |
| PHASE 1 | | 0% | 323 | 323 | 71 | 01-Jun-11 | | 19-Apr-12 | |
| PHASE 2 | | 0% | 563 | 563 | 0 | 01-Jun-11 | | 14-Dec-12 | |
| PHASE 3 | | 0% | 136 | 136 | 247 | 17-Dec-12 | | 01-May-13 | |
| PHASE 4 | | 0% | 111 | 111 | 241 | 10-Apr-13 | | 30-Jul-13 | |
| CONSTRUCTION TEAM 3 | | 0% | 1186 | 1186 | 393 | 30-Nov-09 | | 27-Feb-13 | |
| ZONE 7 | | 0% | 1186 | 1186 | 393 | 30-Nov-09 | | 27-Feb-13 | |
| PHASE 1 | | 0% | 1116 | 1116 | 463 | 30-Nov-09 | | 19-Dec-12 | |
| PHASE 2 | | 0% | 1010 | 1010 | 393 | 25-May-10 | | 27-Feb-13 | |
| PHASE 3 | | 0% | 646 | 646 | 433 | 14-Apr-11 | | 18-Jan-13 | |
| CONSTRUCTION TEAM 4 | | 0% | 1097 | 1097 | 335 | 26-Apr-10 | | 26-Apr-13 | |
| ZONE 8A | | 0% | 1097 | 1097 | 335 | 26-Apr-10 | | 26-Apr-13 | |
| CONSTRUCTION TEAM 5 | | 0% | 529 | 529 | 653 | 01-Apr-11 | | 10-Sep-12 | |
| ZONE 8B | | 0% | 529 | 529 | 653 | 01-Apr-11 | | 10-Sep-12 | |
| MISCELLANEOUS | | 0% | 749 | 749 | 0 | 07-Jun-12 | | 25-Jun-14 | |
| TOLLING FACILITY &OTHER EQUIPMENT (BY OTHERS) | | 0% | 241 | 241 | 0 | 30-Jul-13 | | 27-Mar-14 | |
| FINAL ASPHALT | | 0% | 749 | 749 | 0 | 07-Jun-12 | | 25-Jun-14 | |
| ITS SOLUTIONS | | 0% | 152 | 39 | 1668 | 25-Jul-09 | 10-Apr-09 | 02-Sep-09 | |




Remaining Level of Effort | Remaining Work | Summary
Actual Work | Milestone

**Appendix 11.12**

DBE Utilization Plan

ANTICIPATED DBE UTILIZATION & ANNUAL REPORTING CHART BY FEDERAL FISCAL YEAR

I595 ROADWAY IMPROVEMENTS PROJECT

**REV # 2**

**ADBEPS 7/09**

FINANCIAL PROJECT NO. 420809-3-52-01, FAP 5951 553i, CONTRACT: E4J69,

CONCESSIONAIRE: I595 Express, LLC., CONTRACT AWARD: $1,197

$ Millions

| FEDERAL FISCAL REPORTING PERIOD | | PROFESSIONAL SERVICES DBE UTILIZATION | | | | | | | | | CONSTRUCTION DBE UTILIZATION | | | MAINTENANCE DBE UTILIZATION | | | TOTAL DBE UTILIZATION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DESIGN | | | C E I SERVICES | | | TOTAL PROFESSIONAL SVS | | | | | | | | | | | |
| FROM | TO | Adjusted Contract Amount | Anticipated DBE Utiliz | | Adjusted Contract Amount | Anticipated DBE Utiliz | | Adjusted Contract Amount | Anticipated DBE Utiliz | | Adjusted Contract Amount | Anticipated DBE Utiliz | | Adjusted Contract Amount | Anticipated DBE Utiliz | | Adjusted Contract Amount | Anticipated DBE Utiliz | |
| | | $ | $ | % | $ | $ | % | $ | $ | % | $ | $ | % | $ | $ | % | $ | $ | % |
| 03/03/09 | 09/30/09 | $35.50 | $2.48 | 7.0% | $1.05 | $0.01 | 1.0% | $36.55 | $2.49 | 6.8% | | | | | | | | | |
| 06/15/09 | 09/30/09 | | | | | | | | | | $2.35 | $0.82 | 35.1% | | | | | | |
| 07/21/09 | 09/30/09 | | | | | | | | | | | | | $1.63 | $0.04 | 2.4% | | | |
| 03/03/09 | 09/30/09 | | | | | | | | | | | | | | | | $40.53 | $3.35 | 8.3% |
| 10/01/09 | 09/30/10 | $39.50 | $3.59 | 9.1% | $6.04 | $0.48 | 7.9% | $45.54 | $4.07 | 8.9% | $164.13 | $13.18 | 8.0% | $4.28 | $0.40 | 9.3% | $213.95 | $17.65 | 8.2% |
| 10/01/10 | 09/30/11 | | | | $7.71 | $0.69 | 8.9% | $7.71 | $0.69 | 8.9% | $234.01 | $18.73 | 8.0% | $4.28 | $0.40 | 9.3% | $246.00 | $19.82 | 8.1% |
| 10/01/11 | 09/30/12 | | | | $7.24 | $0.65 | 9.0% | $7.24 | $0.65 | 9.0% | $235.54 | $18.85 | 8.0% | $3.92 | $0.32 | 8.2% | $246.70 | $19.82 | 8.0% |
| 10/01/12 | 09/30/13 | | | | $4.76 | $0.43 | 9.0% | $4.76 | $0.43 | 9.0% | $141.78 | $11.59 | 8.2% | $4.30 | $0.35 | 8.1% | $150.84 | $12.37 | 8.2% |
| 10/01/14 | 09/30/14 | | | | $1.88 | $0.06 | 3.2% | $1.88 | $0.06 | 3.2% | $15.09 | $1.06 | 7.0% | $4.30 | $0.35 | 8.1% | $21.27 | $1.47 | 6.9% |
| TOTALS | | $75.00 | $6.07 | 8.1% | $28.68 | $2.32 | 8.1% | $103.68 | $8.39 | 8.1% | $792.90 | $64.23 | 8.1% | $22.71 | $1.86 | 8.2% | $919.29 | $74.48 | 8.1% |

# PROJECT MANAGEMENT PLAN

# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT H – CORRIDOR MANAGEMENT ORGANIZATION CHART

# Corridor Management Organization Chart

7-22-09

**District Secretary**
**James Wolfe**

**Director of Operations**
**Mike Bienvenu**

**Director of Transportation Development**
**Gerry O'Reilly**

**Director of Public Information**
Barbara Kelleher
Laila Haddad– MRG

**Legal**
Clay McGonagill - FDOT Central Office
Patrick Harder – Nossaman, LLP

**Finance**
Stacy Miller
Gary Drzewiecki – FDOT Central Office
Jeffrey Parker – Jeffrey Parker & Associates

**Executive Oversight Committee (EOC)**

**FHWA**
**Andrew DeTizio and Tom Goldstein**

**Florida's Turnpike Liaison**
Rebecca Bolan-PBS&J

**Central Office Structures**
Tom Andres and Tom Waits

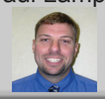




**I-595 Project Manager**
Joe Borello

**District Construction**
Pete Nissen

**Construction / Operations PM**
Paul Lampley



**District Construction Compliance Officer**
Marty Anderson

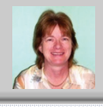
**Corridor Design Consultant**
Phil Schwab – RS&H

**In-House Design**
Howard Webb

**Materials Laboratory**
Hesham Ali

**Oversight CEI**
Ed Perez - TCG

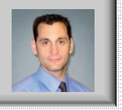
**Maintenance**
Maria Connolly



**Traffic Operations**
**(ITS)-** Dong Chen
**(Safety)-**Gilbert Soles

**Drainage**
Francis Lewis
Chris Jackson- RS&H

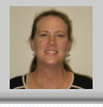
**Roadway**
Richard Creed
Ian Biava- RS&H



**Utilities**
Tim Brock
Mike Melendez -GBF

**Structures**
Fred Ochoa
Rob Woodruff- RS&H

**Planning & Environmental Management**
Ann Broadwell
Scott Seeburger



**Office of Modal Development**
Jeff Weidner

# PROJECT MANAGEMENT PLAN

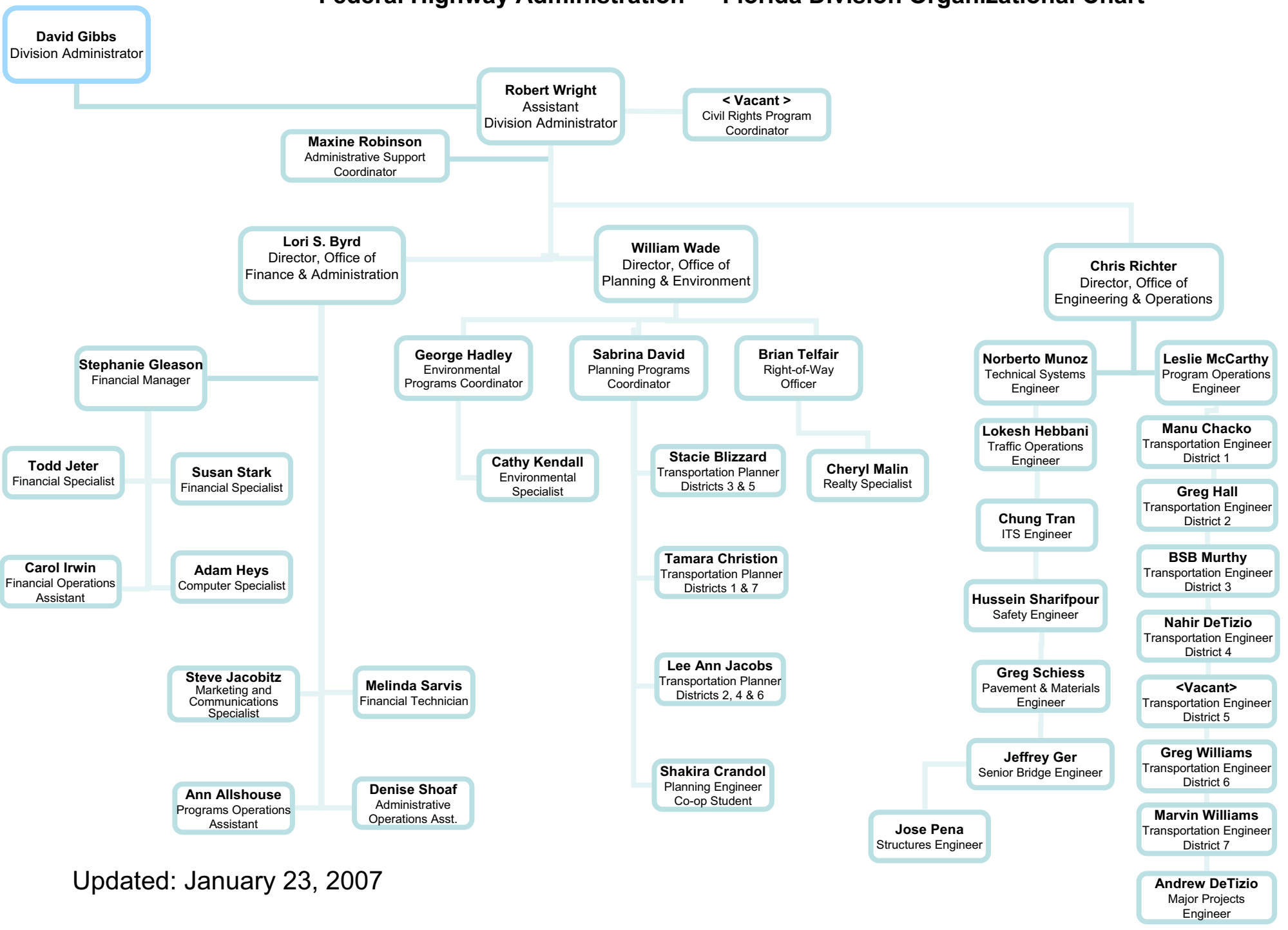
# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

## From I-75 Interchange to I-95 Interchange
## Broward County, Florida

## EXHIBIT I – FHWA FLORIDA DIVISION ORGANIZATION CHART

# Federal Highway Administration — Florida Division Organizational Chart




Updated: January 23, 2007

# PROJECT MANAGEMENT PLAN

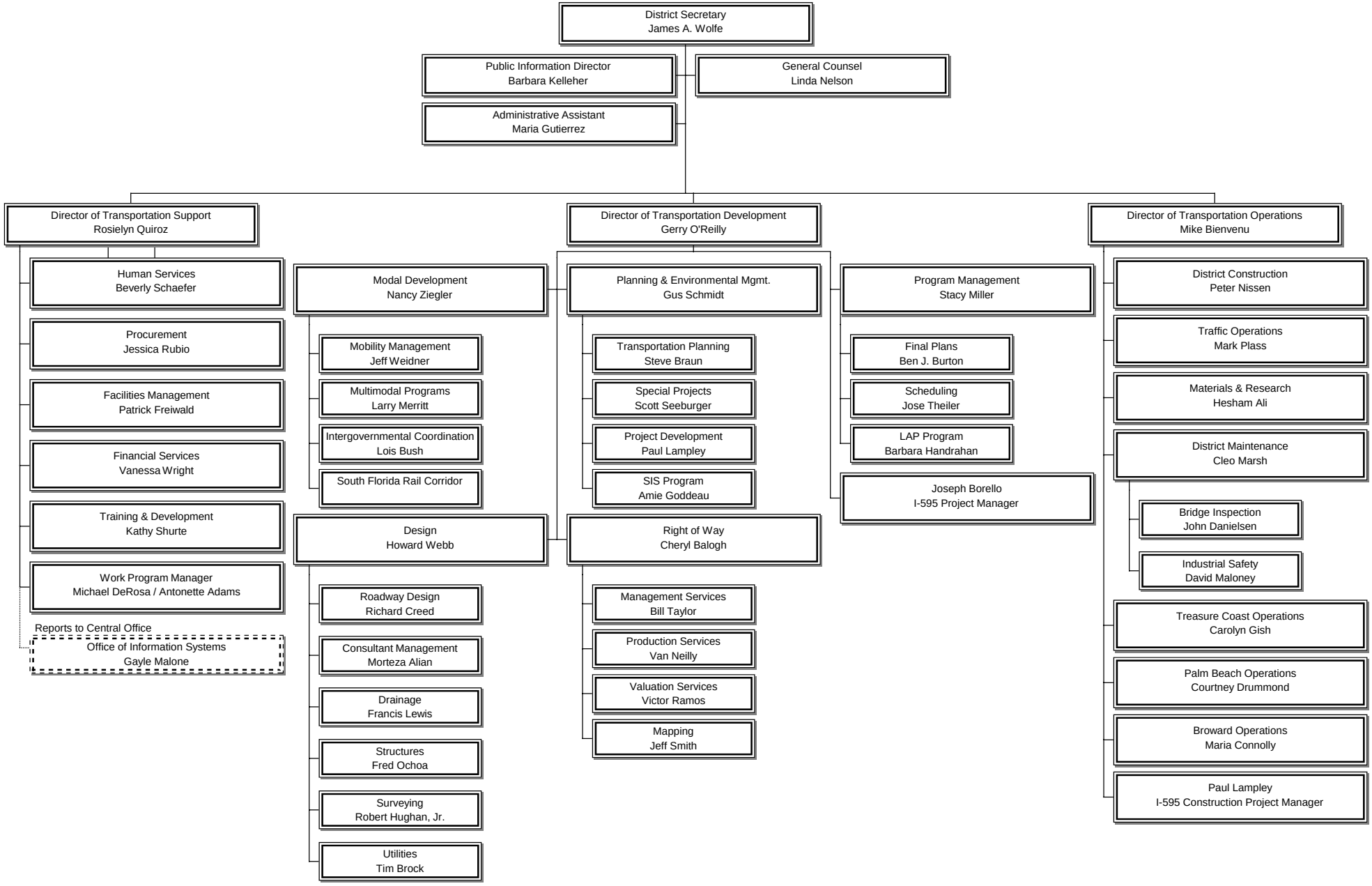
# for

# I-595 (SR 862) CORRIDOR IMPROVEMENTS

# From I-75 Interchange to I-95 Interchange
# Broward County, Florida

## EXHIBIT J – FDOT D4 ORGANIZATION CHART

# DEPARTMENT OF TRANSPORTATION
# DISTRICT FOUR ORGANIZATION



# 19.0 EXECUTIVE LEADERSHIP ENDORSEMENT

## 19.1 GENERAL

The FHWA and FDOT District 4 have reviewed and participated in the development of the initial Project Management Plan (PMP) and update, and are in agreement with the project roles, responsibilities, processes and activities as described in the PMP for the design, construction, operations and maintenance of the I-595 Corridor Improvements Project. The effectiveness of the PMP will be continuously evaluated, and revisions will be issued as the project progresses in order to generate the most effectively managed project that meets the project goals and objectives as described in Section i.3.

## 19.2 ENDORSEMENT

The undersigned fully endorse the PMP, are committed to achieving the goals and objectives for the project, and hereby authorize the initiation of the procedures and requirements as set forth in the PMP.

_____

Date

David C. Gibbs

Division Administrator

Federal Highway Administration - Florida Division

_____

Date

James A. Wolfe, P.E.

District Secretary

Florida Department of Transportation – District 4